PRO-32 Portable Scanner/Receiver
(200-0133

Care and Maintenance

Your PRO-32 represents a fine example of electronic engineering and construction. As such, it should be treated accordingly.

If at anytime you suspect that your unit is not performing as it should, stop by your local RadioShack store. Our personnel are there to assist you and arrange for service, if needed.

Keep it dry. If water should get on it, wipe it off immediately. Water contains minerals that can corrode electronic circuits.

Do not store in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and can even distort or melt certain plastics.

Do not drop your product. This will likely result in failure to operate. Circuit boards can crack and cases may not survive the impact. Handling your product roughly will shorten its useful life.

Do not use or store in areas of high levels of dirt or dust. The electronics may be contaminated. Any moving parts will wear prematurely.

Do not use harsh chemicals, cleaning solvents or strong detergents to keep your unit looking new. You need only wipe it with a dampened cloth from time to time.

Always make sure any batteries used are fresh and are of the correct type. Never use general purpose batteries if alkaline cells are called for. Old or almost dead batteries are also dangerous. A worn out battery can leak chemicals which will destroy electronic circuits

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FEATURES

Your PRO-32 Portable Scanner is loaded with features.

Covers all these bands:

30-50 MHz (VHF Lo)
50-54 MHz (Ham Radio 6m)
108-136 MHz (Aircraft)
138-144 MHz (Government)
144-148 MHz (Ham Radio 2m)
148-174 MHz (VHF Hi)
380-450 MHz (Ham Radio and Government)
450-470 MHz (UHF Lo)
470-512 MHz (UHF Hi)

A total 23,684 frequencies!

A total of 200 channels for storing frequencies.

10 frequencies located during search may be stored on channels in the Monitor Bank.

Rapid transfer from Monitor to Permanent Memory Banks.

Large multi-purpose LCD shows which channels and frequencies are being scanned, monitored or programmed as well as the status of the channels and the operation mode of the PRO-32.

Includes channel lockout with built-in skipper circuit.

Provides an optional two-second scan delay to eliminate missed replies on any channel.

Sharp reception with a crystal filter for 1st IF (10.7 MHz) and a ceramic filter for 2nd IF (455 kHz).

Holds memorized frequencies with battery backup.

General Guide To Scanning

Birdies

Birdies are frequencies your scanner uses when it operates. These operating frequencies might interfere with broadcasts on the same frequencies. If you program one of these frequencies, you hear only noise on that frequency.

If the interference is not severe, you might be able to turn SQUELCH clockwise to cut out the birdie. The most common birdies to watch for are listed below.

Birdie Frequencies:

31.05 MHz	124.20 MHz
41.40 MHz	134.55 MHz
51.75 MHz	144.90 MHz
113.85 MHz	155.25 MHz

Reception Notes

Reception of the frequencies covered by your scanner is mainly "line of sight". That means you usually cannot hear stations that are beyond the horizon. During the summer months you may be able to hear stations in the 30-50 MHz range located several hundred or even thousand of miles away. This is because of summer atmospheric conditions. This type of reception is unpredictable but often very interesting!

One very useful service is the National Weather Service's continuous weather broadcast. These broadcasts contain weather forecasts and data for the areas around the station, plus bulletins on any threatening weather conditions. These stations use three frequencies - 162.40, 162.475 or 162.55 MHz. In most areas of the country, you can receive one of these frequencies.

A Guide To The Action Bands

With the right frequencies programmed into your PRO-Series Scanner, you

can monitor exciting events. With a little investigation, you can find active frequencies in your community. We can give you some general pointers, and you can take it from there. Please use caution and common sense when you hear an emergency call. Never go to the scene of an emergency. It could be very dangerous.

Find out if there is a local club that monitors your community's frequencies. Perhaps a local electronics repair shop that works on equipment similar to your scanner can give you frequencies used by local radio services.

A volunteer police department or fire department can also be a good source for this information.

As a general rule on VHF, most activity is concentrated between 153.785 and 155.98 MHz and then again from 158.73 to 159.46 MHz. Here you find local government, police, fire and most such emergency services. If you are near a railroad yard or major railroad tracks, look around 160.0 to 161.9 MHz for signals.

In some larger cities, there has been a move to the UHF bands for emergency service. Here, most of the activity is between 453.025 and 453.95 MHz and between 456.025 and 467.925 MHz.

In the UHF band, frequencies between 456.025 and 459.95 MHz and between 465.025 and 469.975 MHz are used by mobile units and control stations associated with base and repeater units that operate 5 MHz lower (that is, 451.025 to 454.950 and 460.025 to 464.975 MHz). This means that if you find an active frequency inside one of these spreads, you can look 5 MHz lower (or higher) to find the base station/repeater for that service.

Typical Band Usage

The following is a brief listing of the typical services that use the bands you scanner can receive. This listing helps you decide which ranges you would like to scan.

These frequencies are subject to change, and might vary from area to area. For a more complete listing refer to the Police Call Radio Guide available at you local RadioShack store.

Abbreviations:

Affiliate Radio System: ..... Mars
Amateur: ..... Ham
Automobile Emergency: ..... Auto Emer.
Broadcast Remote: ..... BC.R
Bureau of Reclamation: ..... Bur.Recl.
Civil Air Patrol: ..... CAP
Department of Agriculture and Forestry: ..... Agr. And For.
Fire Department: ..... F.D.
Forest Products: ..... For.Prod.
Forestry Conservation: ..... Fors.Cons.
Government: ..... Govt.
Highway Maintenance: ..... Hwy.
Land Transportation: ..... Land Tr.
Local Government: ..... L.Govt.

Manufacturers: ..... Mfg.
Military: ..... MIL
Mobile Telephone : ..... Mob.Tel.
Motion Picture: ..... Mot.P.
Motor Carrier: ..... Buses.Trucks
National Parks: ..... Nat.Park
Petroleum: ..... Pet.
Police: ..... P.D.
Power Utilities: ..... Power
Radio Paging: ..... Page
Railroad: ..... R.R.
Relay Press: ..... Press
State Police: ..... St.P.D.
Special Emergency: ..... Sp.Emer.
Special Industry: ..... Sp.Ind.
Taxicab Radio: ..... Taxi
Telephone Maintenance: ..... Tel.Maint.
U.S. Coastal and Geodetic Survey: ..... U.S.C.G.S.
U.S. Navy: ..... USN
U.S. Weather Bureau: ..... U.S.W.B.

ATTENTION: Your scanner may not be able to receive all frequencies and/or modes of reception that are contained within this document. For complete information of your scanner's capabilities, be sure to read your owner's manual completely.

Guide To Frequencies

National Weather Frequencies:

1) 161.650	5) 162.440	9) 162.525
2) 161.775	6) 162.450	10) 162.550
3) 162.400	7) 162.475	11) 163.275
4) 162.425	8) 162.500	

Ham Radio Frequencies

Ham operators often transmit emergency information when other communication methods break down. The following chart shows some of the frequencies that Hams use.

Wavelength (Meters)	Frequency (MHz)
10-meter	28.000-29.700
6-meter	50.000-54.000
2-meter	144.000-148.000
70-cm	420.000-450.000

The following are the channels and frequencies of the Citizens Band:

1) 26.965	21) 27.215
2) 26.975	22) 27.225
3) 26.985	23) 27.255
4) 27.005	24) 27.235
5) 27.015	25) 27.245
6) 27.025	26) 27.265

7)	27.035	27)	27.275
8)	27.055	28)	27.285
9)	27.065	29)	27.295
10)	27.075	30)	27.305
11)	27.085	31)	27.315
12)	27.105	32)	27.325
13)	27.115	33)	27.335
14)	27.125	34)	27.345
15)	27.135	35)	27.355
16)	27.155	36)	27.365
17)	27.165	37)	27.375
18)	27.175	38)	27.385
19)	27.185	39)	27.395
20)	27.205	40)	27.405

Guide To The Action Bands

United States Broadcast Bands

In the United States, there are several broadcast bands. The standard AM and FM bands are probably the most well known. There are also four television audio broadcast bands-the lower three transmit on the VHF band and the fourth transmits on the UHF band.

Frequency Range	Allocation
54.0 - 72.0 MHz	VHF Television
76.0 - 88.0 MHz	VHF Television
88.0 - 108.0 MHz	Standard FM
174.0 - 216.0 MHz	VHF Television
470.0 - 805.75 MHz	UHF Television

International Broadcast Bands

Several short-wave bands are allocated for international broadcasting because of the nature of propagation of high frequencies. The bands are sometimes identified according to the approximate wavelength of the signals in meters. Your scanner may receive the 11-meter band, from 25.6 - 26.10 MHz.

Typical Band Usage

HF Band (3.0 - 30.0 MHz):

Mid Range:	25.00 - 28.63 MHz
10-Meter Amateur Band:	28.00 - 29.70 MHz
High Range:	29.70 - 29.90 MHz

VHF Band (30.00 - 300.0 MHz):

Low range:	30.00 - 50.00 MHz
6-Meter Amateur:	50.00 - 54.00 MHz
FM-TV Audio Broadcast, Wide Band:	54.00 - 72.00 MHz
FM Radio Broadcast, Wide Band:	88.00 - 108.00 MHz
Aircraft:	108.00 - 136.00 MHz
U.S. Government:	138.00 - 144.00 MHz
2-Meter Amateur:	144.00 - 148.00 MHz

High Range: ..... 148.00 - 174.00 MHz
New Mobile Narrow Band: ..... 220.00 - 222.00 MHz
1.3-Meter Amateur: ..... 222.00 - 225.00 MHz
Military Aircraft: ..... 225.00 - 287.80 MHz

UHF Band (300.00 MHz - 3.0 GHz):

Military Aircraft: ..... 311.00 - 384.00 MHz
U.S. Government: ..... 406.00 - 470.00 MHz
0.6-Meter Amateur: ..... 420.00 - 450.00 MHz
Low Range: ..... 450.00 - 470.00 MHz
FM-TV Audio Broadcast, Wide Band: ..... 470.00 - 806.00 MHz
Conventional Systems: ..... 851.00 - 856.00 MHz
Conventional/Trunked Systems: ..... 856.00 - 861.00 MHz
Trunked Systems: ..... 861.00 - 866.00 MHz
Public Safety: ..... 866.00 - 869.00 MHz
Common Carrier: ..... 869.00 - 894.00 MHz
Private Trunked: ..... 935.00 - 940.00 MHz
General Trunked: ..... 940.00 - 941.00 MHz

Primary Usage:

As a general rule, most of the radio activity is concentrated on the following frequencies:

VHF Band:

2-Meter Amateur Band: ..... 144.000 - 148.000 MHz
Government, police, and Fire: ..... 153.785 - 155.980 MHz
Emergency Services: ..... 158.730 - 159.460 MHz
Railroad: ..... 160.000 - 161.900 MHz

UHF Band:

.6 cm Amateur Band FM Repeaters: ..... 440.000 - 450.000 MHz
Land Mobile "Paired" Frequencies: ..... 450.000 - 470.000 MHz
Base Stations: ..... 451.025 - 454.950 MHz
Mobile Units: ..... 456.025 - 459.950 MHz
Repeater Units: ..... 460.025 - 464.975 MHz
Control Stations: ..... 465.025 - 469.975 MHz

NOTE: UHF remote control stations and mobile units typically operate at 5 MHz higher than their associated base and relay repeater units.

Specified Intervals

Frequencies in different bands are accessible only at specific intervals.

For Example:

VHF, HAM, and Government: ..... 5.0 kHz steps
All Others: ..... 12.5 kHz steps
Aircraft: ..... 25.0 kHz steps

Note: Your scanner rounds the entered frequency to the nearest valid frequency. For example, if you try to enter 151.473, the scanner might accept this as 151.470.

Band Allocation

To help you decide which frequency ranges to search, use the following listing of the typical services that use the frequencies your scanner receives. These frequencies are subject to change, and might vary from area to area. For a more complete listing, refer to the "Police-Call Radio Guide including Fire and Emergency Services", as well as "Beyond Police Call", "Aeronautical Directory", "Nautical Directory" and "Now you're Talking" texts available at your local RadioShack store.

Abbreviations

AIR: ..... Aircraft
BIFC: ..... Boise (ID) Interagency Fire Cache
BUS: ..... Business
CAP: ..... Civil Air Patrol
CB: ..... Citizens Band
CCA: ..... Common Carrier
CSB: ..... Conventional Systems
CTSB: ..... Conventional/Trunked Systems
FIRE: ..... Fire Department
HAM: ..... Amateur (HAM) Radio
GOVT: ..... Federal Government
GMR: ..... General Mobile Radio
GTR: ..... General Trunked
IND: ..... Industrial Services
MARI: ..... Maritime Limited Coast
MARS: ..... Military Affiliate Radio System
MED: ..... Emergency/Medical Services
MIL: ..... U.S. Military
MOV: ..... Motion Picture/Video Industry
NEW: ..... New Mobile Narrow
NEWS: ..... Relay Press
OIL: ..... Oil/Petroleum Industry
POL: ..... Police Department
PUB: ..... Public Services
PSB: ..... Public Safety
PTR: ..... Private Trunked
ROAD: ..... Road & Highway Maintenance
RTV: ..... Radio/TV Remote Broadcast Pickup
TAXI: ..... Taxi Services
TELBL: ..... Mobile Telephone
TELC: ..... Cordless Telephones
TELM: ..... Telephone Maintenance
TOW: ..... Tow Trucks
TRAN: ..... Transportation Services
TSB: ..... Trunked Systems
TVn: ..... FM-TV Audio Broadcast
USXX: ..... Government Classified
UTIL: ..... Power & Water Utilities
WTHR: ..... Weather

High Frequency (HF)-(3 - 30 MHz):
High Band - (25.00 - 27.36 MHz):

25.020 - 25.320: ..... IND

25.870 - 26.470: ..... RTV
26.62: ..... CAP
26.966 - 27.405: ..... CB
27.430 - 27.630: ..... BUS

10-Meter Amateur Band - (28.0 - 29.7 MHz):

28.000 - 29.700: ..... HAM

Very High Frequency (VHF) - (30 - 300 MHz):

Low Band - (29.7 - 50 MHz - in 5 kHz steps):

29.700 - 29.790: ..... IND
29.900 - 30.550: ..... GOVT, MIL
30.580 - 31.980: ..... IND, PUB
32.000 - 32.990: ..... GOVT, MIL
33.020 - 33.980: ..... BUS, IND, PUB
34.010 - 34.990: ..... GOVT, MIL
35.020 - 35.980: ..... BUS, PUB, IND, TELM
36.000 - 36.230: ..... GOVT, MIL
36.250: ..... Oil spill clean up
36.270 - 36.990: ..... GOVT, MIL
37.020 - 37.980: ..... PUB, IND
38.000 - 39.000: ..... GOVT, MIL
39.020 - 39.980: ..... PUB
40.000 - 42.000: ..... GOVT, MIL, MARI
42.020 - 42.940: ..... POL
42.960 - 43.180: ..... IND
43.220 - 43.680: ..... TELM, IND, PUB
43.700 - 44.600: ..... TRAN
44.620 - 46.580: ..... POL, PUB
46.600 - 46.990: ..... GOVT, TELC
47.020 - 47.400: ..... PUB
47.420: ..... American Red Cross
47.440 - 49.580: ..... IND, PUB
49.610 - 49.990: ..... MIL, TELC

6-METER Amateur Band (50-54 MHz):

50.00 - 54.00: ..... HAM

FM-TV Audio Broadcast, Wide Band (54-72 MHz):

59.750: TV2
65.750: TV3
71.750: TV4

Land Mobile Service Band (72-76 MHz):

FM-TV Audio Broadcast, Wide Band (76-88 MHz):

81.750: TV5
87.750: TV6

FM Radio Broadcast, Wide Band (88-108 MHz):

Aircraft Band (108-136 MHz):

108.000 - 121.490: ..... AIR
121.500: ..... AIR emergency
121.510 - 136.000: ..... AIR

U.S. GOVERNMENT BAND (138-144 MHz):

137.000 - 144.000: ..... GOVT, MIL

VHF-Hi BAND (148-174 MHz):

148.050 - 150.345: ..... CAP, MARS, MIL
150.775 - 150.790: ..... MED
150.815 - 150.965: ..... TOW
150.980: ..... Oil spill clean up
150.995 - 151.130: ..... ROAD
151.145 - 151.475: ..... POL
151.490 - 151.955: ..... IND, BUS
151.985: ..... TELM
152.030 - 152.240: ..... TELB
152.270 - 152.465: ..... IND, TAXI
152.480: ..... BUS
152.510 - 152.840: ..... TELB
152.870 - 153.020: ..... IND, MOV
153.035 - 153.175: ..... IND, OIL, UTIL
153.740 - 154.445: ..... PUB, FIRE
154.490 - 154.570: ..... IND, BUS
154.585: ..... Oil spill clean up
154.600 - 154.625: ..... BUS
154.665 - 156.240: ..... MED, ROAD, POL, PUB
165.255: ..... OIL
156.275 - 157.425: ..... MARI
157.450: ..... MED
157.470 - 157.515: ..... TOW
157.530 - 157.725: ..... IND, TAXI
157.740: ..... BUS
157.770 - 158.100: ..... TELB
158.130 - 158.460: ..... BUS, IND, OIL, TELM, UTIL
158.490 - 158.700: ..... TELB
158.730 - 159.465: ..... POL, PUB, ROAD
159.480: ..... OIL
159.495 - 161.565: ..... TRAN
161.580: ..... OIL
161.600 - 162.000: ..... MARI, RTV
162.0125 - 162.35: ..... GOVT, MIL, USXX
162.400 - 162.550: ..... WTHR
162.5625 - 162.6375: ..... GOVT, MIL, USXX
162.6625: ..... MED
162.6875 - 163.225: ..... GOVT, MIL, USXX
163.250: ..... MED
163.275 - 166.225: ..... GOVT, MIL, USXX
166.250: ..... GOVT, RTV, FIRE
166.275 - 169.400: ..... GOVT, BIFC
169.445: ..... WIRELESS MIKES
169.500: ..... GOVT
169.505: ..... WIRELESS MIKES

169.55 - 169.9875: ..... GOVT, MIL, USXX
170.000: ..... BIFC
170.025 - 170.150: ..... GOVT, RTV, FIRE
170.175 - 170.225: ..... GOVT
170.245 - 170.305: ..... WIRELESS MIKES
170.350 - 170.400: ..... GOVT, MIL
170.425 - 170.450: ..... BIFC
170.475: ..... PUB
170.4875 - 173.175: ..... GOVT, PUB, WIRELESS MIKES
173.225 - 173.375: ..... MOV, NEWS, UTIL
173.3875 - 178.5375: ..... MIL
173.5625 - 173.5875: ..... MIL Medical/Crash Crews
173.60 - 173.9875: ..... GOVT

FM-TV Audio Broadcast, VHF Wide Band (174-216 MHz):

179.750: TV7
185.750: TV8
191.750: TV9
197.750: TV10
203.750: TV11
209.750: TV12
215.750: TV13

New Mobil Narrow Band (220-222 MHz):

220.000 - 222.000: ..... NEW

1.3-Meter Amateur Band (222-225 MHz):

222.000 - 225.000: ..... HAM

MILITARY AIRCRAFT BAND (237.9-287.8 MHz):

237.900: ..... Coast Guard Search & Rescue
239.800: ..... FAA Weather
241.000: ..... ARMY
243.000: ..... EMERGENCY
255.400: ..... FAA FLIGHT SERVICE
257.800: ..... CIVILIAN TOWERS
287.800: ..... Coast Guard Air/Sea Rescue

Ultra High Frequency (UHF)-(300 MHz-3 GHz)

Military Aircraft Band (319.1 - 383.9 MHz):

319.100: ..... FAA Traffic Control
321.000 - 336.600: ..... Air Force
342.500 - 344.600: ..... FAA Weather
346.400 - 364.200: ..... Air Force Traffic Control
381.800 - 383.900: ..... Coast Guard

U.S. Government Band (406-420 MHz):

406.125 - 419.975: ..... GOVT, USXX

70-cm Amateur Band (420-450 MHz):

420.000 - 450.000: ..... HAM

Low Band (450-470 MHz):

450.050 - 450.925: ..... RTV
451.025 - 452.025: ..... IND, OIL, TELM, UTIL
452.0375 - 453.00: ..... IND, TAXI, TRAN, TOW, NEWS
453.0125 - 453.9875: ..... PUB
454.000: ..... OIL
454.025 - 454.975: ..... TELB
455.050 - 455.925: ..... RTV
457.525 - 457.600: ..... BUS
458.025 - 458.175: ..... MED
460.0125 - 460.6375: ..... FIRE, POL, PUB
460.650 - 462.175: ..... BUS
462.1875 - 462.450: ..... BUS, IND
462.4625 - 462.525: ..... IND, OIL, TELM, UTIL
462.550 - 462.725: ..... GMR
462.750 - 462.925: ..... BUS
462.9375 - 463.1875: ..... MED
463.200 - 467.925: ..... BUS

FM-TV Audio Broadcast, UHF Wide Band (470-512 MHz):
(Channels 14-69 in 6 MHz steps):

475.750: ..... Channel 14
481.750: ..... Channel 15
487.750: ..... Channel 16
805.750: ..... Channel 69

Note: Some cities use the 470-512 MHz band for land/mobile service.

Conventional Systems Band - Locally Assigned

851.0125 - 855.9875: ..... CSB

Conventional/Trunked Systems Band - Locally Assigned

856.0125 - 860.9875: ..... CTSB

Trunked Systems Band - Locally Assigned

861.0125 - 865.9875: ..... TSB

Public Safety Band - Locally Assigned

866.0125 - 868.9875: ..... PSB

Common Carrier

869.010 - 894.000: ..... CCA

Private Trunked

935.0125 - 939.9875: ..... PTR

General Trunked

940.0125 - 940.9875: ..... GTR

Frequency Conversion

The tuning of a station can be expressed in frequency (kHz or MHz) or in wavelength (meters). The following information can help you make the necessary conversions.

1 MHz (million)=1,000 kHz (thousand)

To convert MHz to kHz, multiply by 1,000:

9.62 MHz x 1000 = 9620 kHz

To convert from kHz to MHz, divide by 1,000

2780 kHz / 1000 = 2.780 MHz

To convert MHz to meters, divide 300 by the number of megahertz

300 / 7.1 MHz = 42.25 meters

OPERATING THE PRO-32

Turn on your Pro-32 by rotating OFF/VOLUME clockwise. When first turned on, your Pro-32 might start scanning.

Rotate SQUELCH fully counterclockwise. You'll hear rushing noise from the speaker - if not, rotate VOLUME a little further clockwise. Slowly rotate SQUELCH clockwise until the noise stops. Scanning resumes.

Understanding the Display and Keyboard

The liquid crystal display (LCD) on your Pro-32 displays the channel number, the frequency being received, status of different functions, DELAY or LOCK OUT, and current operation mode. As these symbols move on and off the display, you can see which mode of operation is engaged.

On the display, the line under the bank number shows you which bank you are working with. The blue numerals below the bank number on the keyboard show you the channel numbers in each bank. Bank 1 holds channels numbered 1 through 20, bank 2 holds 21 through 40, and so on through bank 10, which holds the channels 181 through 200.

Display Light

Push [LIGHT] to illuminate the display in the dark. Use this feature sparingly, since to light the display consumes fairly much amount of the battery power.

BATTery LOW Indicator

When the battery power becomes low, the BATT LOW appears on the display and the Pro-32 gives off an alarm sound. Replace or recharge the batteries.

ERROR Indicator

Sometimes when you try to enter a frequency for a channel or as a search range limit, you will find an ERROR on the display and hear three beeps. This means the frequency is in error and you won't be able to enter it into your Pro-32.

Such frequency errors usually mean you've entered a frequency outside the ranges your Pro-32 operates on (such as 225.00 MHz) or you've put the decimal point in the wrong place (14.682 MHz instead of 146.82MHz). Check carefully to find your mistake and then press [CLEAR]. You can now enter the correct frequency.

The ERROR indicator also appears when you try to enter the channel number outside those the Pro-32 operates on (such as Channel 250).

Note: All the settings of delay/lockout/speed/priority/skipping banks are retained when you turn the power off. The next time you turn the Pro-32 on, the same settings as when you turned the unit off are still in effect.

About those Banks . . .

The PRO-32 has ten banks for storage, plus an eleventh bank for temporary storage. Think of it this way, like storing gold in a bank. You have so much gold one safety deposit box cannot hold it all. So you rent additional safety deposit boxes. When you have filled all the boxes in one bank, you put the spill over into another bank.

Suppose you are still searching for additional gold. If you are undecided about the disposition of a gold strike, whether to store it or spend it, you can place it in a special services bank for temporary storage.

Permanent-Memory Storage Banks

Your PRO-32 has a comparable storage system for radio frequencies. It has 10 banks and each bank has 20 storage compartments (like safety deposit boxes) which are called channels. Into each bank you can safely deposit as many as 20 frequencies. Because there are 10 banks with 20 channels each, you can ultimately store a total of 200 frequencies. The blue numbers on the keyboard indicate which channels are allocated to each bank. When the frequencies have been stored, you can scan the banks to find a specific channel.

Temporary-Memory Storage Banks

In the search mode, when you discover a new frequency, you can place it in the temporary storage bank. Think of this eleventh bank, special services bank, as the MONITOR Bank. It not only helps you, in a rapid search, store new frequencies, it also performs rapid transfer to the any of the other ten banks. On the display, MONITOR indicates that you have moved to this bank. When in the monitor mode, the ten numbers at the top of the display represent ten channels in which newly-discovered frequencies may be stored temporarily.

Note: Monitoring can only be accomplished in conjunction with "search." See "Storing Frequencies in Monitor Channels."

The underline symbol indicates the channel in which the frequency will be stored.

Operating Modes

There are four separate operating modes on the PRO-32 . . . programming . manual . scanning . searching.

Programming Frequencies

The programming of the PRO-32 is as simple as 1-2-3. Be sure the KEY LOCK switch is in the KEY (unlock) position.

1. Select the desired channel.

2. Press [PGM] to enter programming mode.

3. Enter the desired frequency and press [ENTER].

Note: If you are uncertain about specific frequencies in your local, RadioShack's "Police Call Directory Including Fire & Emergency Services" is an excellent reference.

Example for Programming a Frequency (frequency 162.55 MHz into channel 20)

Step 1. Select the channel in one of three ways:

a. Press [MANUAL]. Continue pressing until the display shows channel 20.

Press [PGM].

b. Press [2] [0] [MANUAL].

Press [PGM].

- or -

c. Press [PGM].
Press [2] [0].
Press [PGM].

Step 2. Press the keys 1 6 2 . 5 5.

Step 3. Press [ENTER].

To program the next frequency, move to another channel in this way:

Press [PGM] to advance to the next channel.

Repeat the same steps to add more frequencies.

Hints and Tips for Programming

When you make a mistake while entering a number, press [CLEAR] and reenter the correct frequency.

If you enter a frequency that is outside a Pro-32 band range, ERROR indicator lights with a beeping sound. Press [CLEAR] and select another frequency.

Any frequency within a Pro-32 band range will be accepted. However, the frequency that can be stored into Pro-32 memory is in 5kHz steps in the VHF band, 25 kHz steps in the AIR bands and 12.5kHz steps in the UHF bands. The scanner will automatically round off the entered frequency to the closest valid frequency. For example, if you enter 125.2345 MHz, the Pro-32 will accept this entry as 125.2250 MHz. Or the entry 398.2630 MHz will be treated as 398.2625 MHz.

The tuning range of your Pro-32 is permanently stored in the micro processor chip. There's no way it can be altered or extended - even by a skilled electronics technician. So if you try to enter a frequency not in the Pro-32's tuning range, you'll get an error message every time.

If you want to change the frequency entered for a specific channel, enter the new frequency over the old one, following the steps under Programming Frequencies.

After entering all the desired frequencies, you may wish to set the KEY LOCK switch to LOCK to prevent accidental changes to your program. At the lock position, the Pro-32 will ignore all the keys pressed, except the remote keys.

Manual Mode

When you want to stay on a frequency, either in scan mode or search mode, press [MANUAL]. In the manual mode, you can manually advance through the memory channels by pressing [MANUAL] repeatedly. Or enter the channel number and press [MANUAL] to reach the desired channel directly. Also note that in manual mode you can access locked out channel(s) or skipped bank(s).

Remote Keys

When the KEY LOCK switch is in the LOCK position, you can still operate the scanner by using the Remote Keys on the top of the scanner. These include SPEED, SCAN, and MANUAL keys.

Scanning Frequencies

Your Pro-32 will automatically scan all the channels you have programmed and stop whenever it finds a signal.

IMPORTANT: Your Pro-32 won't scan unless SQUELCH is set to the point where no sound is heard between transmissions, that is, no "hiss" sound.

To stop scanning, press [MANUAL]. Then you can select a specific channel you want to listen to. Enter the channel number, then press [MANUAL]. Or press [MANUAL] and continue pressing until you reach the frequency you

want.

Delay

In the scanning mode, your Pro-32 will stop when it finds a channel with a signal. As soon as the signal ends, it immediately begins scanning other channels. Most transmissions are part of a two-way communication.

Press [DELAY] when you wish to hold a channel you are listening to. Your Pro-32 will then hold the channel at least two seconds after each transmission, giving you time to listen.

DELAY appears on the LCD to show that the delay function is engaged for the selected channel.

To release the delay function, press [DELAY] again. It disappears from the display.

Speed Selection

When the power switch is turned on, the scan speed is set to 8 channels per second. Pressing [SPEED] alternates the scan speed between 4 channels per second and 8 channels per second.

Locking Out Frequencies (Skipping Frequencies)

You might want your Pro-32 to skip certain frequencies while it's scanning, such as continuously transmitted weather broadcasts. To lock out such channels, follow these steps:

1. Press [MANUAL] to stop scanning.

2. Continue pressing [MANUAL] until you reach the channel you want to lock out. If you know the channel number, this can be done more quickly. Enter the channel number and then press [MANUAL].

3. Press [L/OUT]. LOCK-OUT appears in the display, indicating this channel will be skipped during scanning.

NOTE: In manual scanning, you can access the locked out channel(s).

To release the lockout function:

1. Press [MANUAL] to stop scanning.

2. Advance to the channel that is locked out.

3. Press [L/OUT] again. LOCK-OUT disappears from the display.

You can lock out as many channels as you like. But there must be at least one channel that is not locked out in each bank. The last channel in a bank cannot be locked out.

Skipping Banks

At initial "power on", all the banks are available to be scanned. You can skip one entire bank while scanning. This is convenient when there are no

frequencies entered in the bank.

There is no need to scan through it. You do not use the LockOUT key to skip Banks. Instead, you follow this procedure:

Turn power on.

Press the number key corresponding to the bank to be skipped.

The corresponding bank number indicator disappears from the display and the entire bank is skipped.

Press the number key again to restore the bank.

Each number on the keyboard has figures in blue. These figures show the channel numbers that are allocated to that particular bank.

As with the lockout function, you cannot skip all banks. The "last" bank cannot be skipped.

Priority

You can scan other channels and still not miss a transmission of special interest to you (police, fire, ambulance, etc.). If a call is received on the priority channel while you are scanning other channels, your Pro-32 will automatically switch to the priority channel.

Programming Priority

At initial 'power on', Channel 1 is set as the priority channel. So if you enter the frequency of particular interest on Channel 1, you need not set the priority channel.

If you want to use another channel as the priority channel, press [PGM], enter the channel number, and press [PRI]. Only one channel is set as the priority channel. If you enter a new priority channel, the previous priority channel is automatically cleared.

Press [PGM].

Press the channel number [2][0].

You can verify the priority channel by pressing [PGM] then [PRI]. The Ch on the display blinks when you scan the priority channel.

Press [PRI].

Using Priority

The priority function is available only in scan or manual mode. Press [PRI] to activate this function. PRIORITY appears on the display. The Receiver will check the priority channel and switch to it if a signal is received on it.

Press [PRI].

To cancel priority, press [PRI] again. PRIORITY disappears from the

display.

Press [PRI].

NOTE: All the settings of delay/lockout/speed/priority/skipping banks are retained even when you turn the power off. The next time you turn the power on, the same settings, as when you turned the Pro-32 off, are in effect.

Searching with your Pro-32

To search for transmissions, press [PGM], enter limits of frequency range, and press [/\] or [\/] to activate "search".

Press [PGM].

Press [LIMIT].

Enter the lower limit of the frequency range to be searched.

Press [ENTER].

Press [LIMIT].

Enter the upper limit of the frequency range to be searched.

Press [ENTER].

Activate "search" by pressing [/\] or [\/]. [\/] starts from the highest frequency and goes down.

[/\] moves in the opposite direction.

Press [SPEED] to accelerate or to slow down the search.

Using DELAY

Search stops when a signal is picked up on a frequency. As soon as the signal ends, searching resumes. Most transmissions are part of a two-way communication. Delay allows for pauses between transmissions.

Press [DELAY] when you wish to stay with a frequency. Your Pro-32 will hold the frequency at least two seconds after each transmission, giving you time to listen.

Press [DELAY].

To release the delay function, press [DELAY] again.

If you wish to restart the search function before the transmission ends, you can do so by first pressing [LIMIT] then either [/\] or [\/].

To re-program the frequency range press [PGM]; press [LIMIT]. Each depression of [LIMIT] moves the - - - up or down on the display.

When - - - is at the top of the display, enter the upper frequency.

When - - - is at the bottom of the display, enter the lower frequency. Press [ENTER] to lock it in memory.

Storing Frequencies in Monitor Channels

Your Pro-32's Temporary Memory Storage Bank has 10 monitor channels. During search, you can store one frequency to each channel.

1. To search for transmissions, press [PGM]. The 10 numbers at the top of the display now function as channels in which new frequencies may be placed for temporary storage.

   Enter limits of frequency range, and press [/\] or [\/] to activate "search."

2. When the search stops on a frequency you want, to store it, press [MON].

   This freezes search, and records the frequency in one of the monitor channels.

3. LCD displays:

```
                    SEARCH
MONITOR 1  2  3  4  5  6  7  8  9  10
        ---
              4 5 2 . 6 6 2 5 MHz
```

   The frequency found is stored in the channel number with the underline.

4. Press [/\] or [\/] to resume searching. If you find another frequency of interest, press [MON] again to store it in the next monitor channel.

Repeat the steps to store the desired frequencies in the monitor channels, 1 through 10. If you repeat the step beyond the tenth channel, the channel reverts to 1, and you will write the new frequency over the old one, and the old frequency will be erased.

Moving Frequencies from Monitor Channels to Permanent Memory

You can move a frequency from a monitor channel to permanent storage simply by pressing [ENTER]. You do not have to write down the frequency and then enter it number by number.

First, enter the program mode. Then select the channel in which you wish to store the newly found frequency. Second, recall the monitored frequency to the display. Third, press [ENTER] to store the frequency in permanent memory.

To do this, follow these steps in the proper sequence:

1. Press [PGM].

   Press the channel number you want to use. Then press [PGM] again.

2. Press [MON].

3. Press [MON] as many times as required to arrive at the monitor channel that contains the frequency you want moved to permanent storage. Or, because you are now in the monitor mode, you may use the keyboard to select the number of the monitor channel. You will see the frequency that you want moved on the display.

4. Press [ENTER]. This entry programs the frequency into the permanent memory channel.

5. If you want to store more frequencies, select another memory channel by keying in the number and [PRG]. Then follow steps 2 through 4 above.

The frequencies in the monitor channels will remain unchanged until you wish to search for, and enter, new frequencies.

When you wish to verify the transfers, return to the permanent memory display by pressing [MANUAL]. The display shows you have returned to the normal mode. The word, BANK, appears at the top of the display. Press channel number and [MANUAL] to check the memory content of a specific channel.

Power Powering Your PRO-32

Operating with Batteries

Two sets of batteries are required - one set for operation, the other for memory backup.

To install batteries, position the Receiver on it's face, press the "=\/=" mark and slide the battery compartment cover off. Take out the battery holder.

Put six fresh AA batteries in the battery holder, matching the polarity markings inside the holder with markings on the batteries (+ to + and - to -). Replace the battery holder. Position the holder correctly. The ribbon should come out from the outer edge of the compartment. If you install the holder in wrong direction, the PRO-32 will not operate. Replace the battery compartment cover.

When the battery voltage becomes low, the BATTery LOW indicator will light on the LCD. Although the PRO-32 may hold the stored frequencies for as long as a month after the LOW BATT indicator lights, it is best to replace batteries immediately. Weak or dead batteries, even the so-called "leak proof" type, can leak damaging chemicals.

We recommend that you use our alkaline ENERCELLs, Cat. No. 23-552. Or, use our rechargeable nickel-cadmium AA batteries, Cat. No. 23-125, with the adapter/charger. The nickel-cadmium batteries can be recharged over 500 times.

To recharge nickel cadmium batteries in the Receiver, simply plug an external adapter/charger into the CHarGe jack. Use only our 273-1455. To fully charge nickel cadmium batteries, leave the adapter/charger connected

for 10 to 18 hours. You can operate the unit while the nickel cadmium batteries are being charged. Disconnect the adapter/charger when charging is over or during power failure.

WARNING: Never connect the adapter/charger to the CHarGe jack when regular or alkaline batteries are installed, because charging can cause these batteries to explode.

Memory Backup Batteries

When you turn the power on, the memory backup starts working and continues to function when the OFF/VOLUME is set to off. Even when you remove batteries for replacement, or disconnect the adapter, the memory will still be backed up for approximately 30 minutes. However, for long term memory backup, you will have to rely on the batteries for memory storage.

Install three button-type batteries (Cat. No. 23-101 or equivalent) in the memory battery holders inside the battery compartment. Replace the memory batteries once a year for continued protection.

Operating on AC Current

You may operate the PRO-32 from AC power provided you use our adapter 273-1455. Connect the plug of adapter to the PoWeR jack and plug the adapter into a standard AC outlet.

Operating from Cigarette Lighter Socket

Or you may power the PRO-32 from your vehicle's battery, if your car has a negative ground electrical system. Use only our 270-1560 auto adapter. Select the plug that fits the PoWeR jack, set center tip negative and use the 9V range of the adapter. When you connect the adapter, the internal batteries are automatically disconnected.

CAUTION: Mobile use of scanners may be unlawful or require a permit in some areas. Check with your local authorities.

Antenna

Attach the flexible antenna to the ANT connector. Align the protrusion on the connector with the notch on the antenna and rotate the metal portion until it is secure.

The flexible antenna can be removed if you wish to try a different antenna. You can attach an external mobile antenna or outdoor base antenna by using the BNC connector on your PRO-32.

RESET Switch

When the LCD shows random display or no display at all, press this switch to clear the PRO-32. With power turned on, press the switch with a ball point pen or similar object. Note however, all the memories stored in your PRO-32 will be cleared by the reset and your scanner will have to be reprogrammed. You may also have to use this switch when the time comes for replacement of memory backup batteries.

Specifications

Frequency Coverage	(VHF-Lo):	30-50 MHz (in 5 kHz steps)
	(Ham):	50-54 MHz (in 5 kHz steps)
	(Aircraft):	108-136 MHz (in 25 kHz steps)
	(Government):	138-144 MHz (in 5 kHz steps)
	(Ham):	144-148 MHz (in 5 kHz steps)
	(VHF-Hi):	148-174 MHz (in 5 kHz steps)
	(Ham/Gov't.):	380-450 MHz (in 12.5 kHz steps)
	(UHF-Lo):	450-470 MHz (in 12.5 kHz steps)
	(UHF-Hi ["T"]):	470-512 MHz (in 12.5 kHz steps)

Channels of Operation: ..... Any 200 channels in any band combinations.
(20 channels x 10 banks) and 10 Monitor channels.

Power Requirements: ..... +9 VDC, 6 AA Batteries, or a suitable adapter
(negative ground only)

Current Drain: ..... 45 mA (Squelched)
160 mA (Full Volume Un-squelched)
3 Silver Oxide Batteries for Memory Back-up

Dimensions (HWD): ..... 7-3/8 x 2-15/16 x 1-3/4 Inches
(187 x 74 x 45 mm)

Weight: ..... 1.2 lbs (550 g) with batteries

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

Troubleshooting

The three silver oxide batteries used to maintain the program memory should be replaced once a year. The frequencies stored in the Scanner memory can be held for approximately 30 minutes without the backup batteries (or without AA batteries or adapter). Check memory contents after replacing batteries. If the memory has been lost, press the RESET button and re-enter the frequencies.

If you have problems . . .

PROBLEM	POSSIBLE CAUSE	REMEDY
Scanner is totally inoperative.	No power	Check to see that batteries Are good and are properly installed.
Scanner is on, but will not scan.	1) Channels are Locked out.	1) Press [MANUAL], then Release each channel from lockout one-by-one.
	2) Squelch control Is not adjusted correctly.	2) Adjust SQUELCH clockwise.
Scan locks on freq- listed in Faxback Doc. # 17653,	"Birdies"	Avoid programming frequencies or only listen to them manually.

If none of these suggested remedies solves the problem, return your set to your nearby RadioShack store for assistance.

Using receivers capable of covering police, fire, emergency and ambulance frequencies in your car may be restricted by law in some areas.

Sensitivity (AM): ..... 20 dB Signal-to-Noise ratio at 60% modulation
108-136 MHz 2.0 uV

(FM): ..... 20 dB Signal-to-Noise ratio at 3 kHz deviation
30-54 MHz 0.6 uV
138-174 MHz 1.0 uV
380-512 MHz 1.0 uV

Spurious Rejection: ..... 30-54 MHz 50 dB at 40 MHz
108-136 MHz 50 dB at 120 MHz
138-174 MHz 50 dB at 154 MHz
380-512 MHz Not Specified.

Selectivity: ..... +/- 9 kHz, 6 dB
+/- 15 kHz, 50 dB

IF Rejection: ..... 10.7 MHz 50 dB at 154 MHz

Scanning Rate: ..... Fast 8 Channels/sec.
Slow 4 Channels/sec.

Search Rate: ..... Fast 8 Steps/sec.
Slow 4 Steps/sec.

Priority Sampling: ..... 2 Seconds

Delay Time: ..... 2 Seconds

Modulation Acceptance: ..... +/- 5 kHz

IF Frequencies: ..... 10.7 MHz and 455 kHz

Filters: ..... 1 Crystal Filter, 1 Ceramic Filter

Squelch Sensitivity: ..... Threshold Less than 1.0 uV
Tight (S + N)/N 15 dB

Antenna Impedance: ..... 50 Ohms

Audio Power: ..... 300 mW nominal

Built-In Speaker: ..... 2" (5 cm) 8 Ohm, Dynamic Type

20 Channel Crystalless Scanner

Aircraft · Marine · Public Service

Bearcat 220

Automatic Scanning Radio

The Bearcat® 220 Scanning
dimension in scanning enjo

Now, one scanner monitors public service bands plus aircraft band frequencies. In fact, the *Bearcat* 220 covers seven bands, Low, and High VHF, UHF, UHF-T, 2-meter and 75CM amateur (Ham) and Aircraft. Up to twenty frequencies may be scanned at once. Or frequencies can be arranged into two banks of ten frequencies each, allowing the listener to choose the bank of most interest.

Not only does the *Bearcat* 220 feature the normal search operation, where frequency limits are set and the scanner searches between them, it also searches all marine or aircraft frequencies by pressing a single button. These frequencies are already stored in memory so no programming of them is required.

The *Bearcat* 220 is crystalless and features push button programming of desired frequencies. A decimal display indicates channels, frequencies and operations as programmed into the scanner. The lockout feature lets the listener skip frequencies not of current interest. When the priority feature is activated, the frequency on channel 1 is sampled every two seconds regardless of other scanner functions. The listener can use a factory set automatic squelch position for easier operation, or manually tune the squelch for close adjustment. In addition, the *Bearcat* 220 has connectors for external antenna, external speakers, and both AC/DC power.

Other important *Bearcat* 220 features include direct channel access for going directly to a desired channel; patented selective scan delay so scanning on desired channels is delayed two seconds after the end of a transmission; and scan speed control which allows scanning and searching at 5 or 15 channels per second.

In addition to the features that make the *Bearcat* 220 unique, it has the superior engineering and "standard" features that have made *Bearcat* the greatest selling scanner in America. Track tuning, patented by *Bearcat,* insures full band coverage without modifications. An electronically switched antenna circuit allows operation from a single antenna, and a front facing speaker provides maximum sound clarity.

Bearcat 220 adds an impressive dimension to scanning. Who but *Electra* could have made it possible.

Vinyl Steel Cabinet
Quality construction provides strength and durability.

Crystalless
Bearcat's solid state circuitry with custom integrated circuits allows almost infinite selection of public service frequencies to monitor without ever having to buy a crystal.

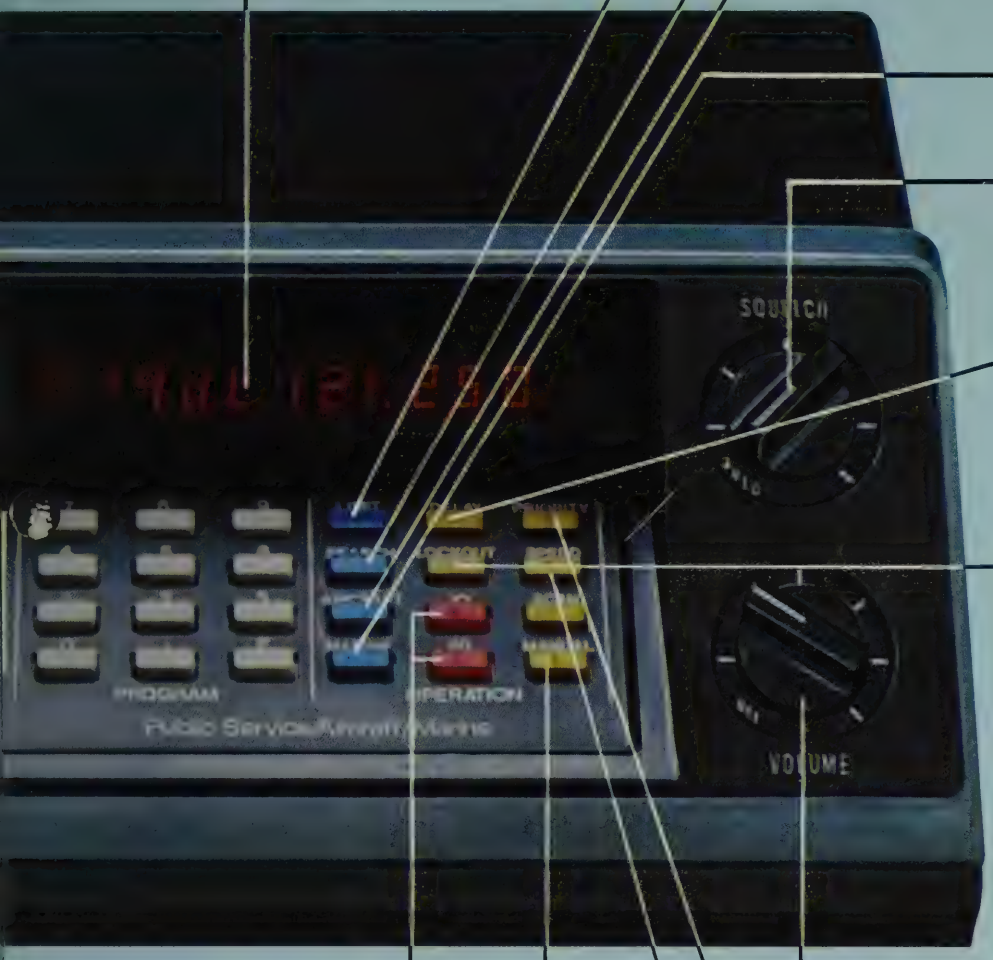
7 Band Coverage
Includes Low, High, UHF and UHF-T public service bands, the 2-meter and 75CM amateur (Ham) band, plus the Aircraft band.

Patented Track Tuning
Bearcat's patented track tuning provides full band coverage on every band—you hear more in each band.

AC/DC
Use the *Bearcat* 220 at home or in authorized vehicle.

UL Listed/FCC Certified
Tested for safe, quality design and manufacture.

adio offers an added ent and information.



Decimal Display
The large decimal display shows channels and frequency as well as features selected.

Rolling Zeros
Exclusive *Bearcat* feature tells you which channels your scanner is monitoring.

Limit
Sets frequency range for search operations.

Search
Seek and find new, exciting frequencies.

Aircraft
Automatically search the entire Aircraft band by pressing one button.

Marine
Search Marine frequencies by pressing one button.

Automatic Squelch
Factory-set automatic squelch for easier operation or manual squelch for close adjustment.

Selective Scan Delay
Patented by Electra, this adds a two-second delay on desired channels to prevent missing transmissions when "calls" and "answers" are on the same frequency.

Lockout
Automatically skip unwanted frequencies while scanning, so valuable scan time isn't wasted.

20 Channels/ 2 banks
Scan up to 20 frequencies at once or either of two banks of 10 channels each.

Simple Programming
Simply punch in the frequency you wish to monitor.

aker
g 3-inch speaker, nt-mounted for more sound.

Manual
Advance directly to a desired channel or step one channel at a time.

Priority
Samples designated priority frequency on channel 1 every 2 seconds.

Speed
Scan and search speed of either 5 or 15 channels per second for closer monitoring of desired frequencies.

On/Off Volume
Power switch and continuously variable volume control.

Bearcat® 220

Bearcat® 220 Features:

- **20 Channels/2 banks**—Scan up to 20 frequencies at once or either of two banks of 10 channels.
- **7 Band Coverage**—Includes Low, High, UHF and UHF-T public service bands, the 2-meter and 75CM amateur (Ham) band, plus the Aircraft band.
- **Automatic Search**—Seek and find new, exciting frequencies.
- **Aircraft Search**—Automatically search the Aircraft band.
- **Marine Search**—Search Marine frequencies by pressing one button.
- **Priority**—Samples designated priority frequency on channel 1 every 2 seconds.
- **Limit**—Sets upper and lower frequencies of search range.
- **Speed**—Choice of either 5 or 15 channels per second scan and search speed for closer monitoring of desired frequencies.
- **Automatic Lockout**—Locks out channels and "skips" frequencies not of current interest.
- **Selective Scan Delay**—Adds a two-second delay on desired channels to prevent missing transmissions when "calls" and "answers" are on the same frequency. Patented by Electra.
- **Simple Programming**—Simply punch in the frequency you wish to monitor.
- **Decimal Display**—The large decimal display shows channels and frequency as well as features selected.
- **Patented Track Tuning**—Receive frequencies across the full band without adjustment. Circuitry is automatically aligned to each frequency monitored.
- **Crystalless**—Without ever buying a crystal you can select from all local frequencies.
- **Automatic Squelch**—Factory-set squelch automatically blocks out unwanted noise.
- **Direct Channel Access**—Move directly to desired channel without stepping through all channels.
- **Deluxe Keyboard**—Makes frequency and feature selection easy for simple programming.
- **Space Age Circuitry**—Custom integrated circuits . . . a *Bearcat* tradition in scanning radios.
- **Rolling Zeros**—This *Bearcat* exclusive tells you which channels your scanner is monitoring.
- **AC/DC**—Operates at home or in authorized vehicle.
- **UL Listed/FCC Certified**—Tested for safe, quality design and manufacture.

Bearcat® 220 Specifications

Frequency Reception Range

Low Band	30- 50 MHz
Aircraft	118-136 MHz
"Ham" Band	144-148 MHz
High Band	148-174 MHz
75CM "Ham"	420-450 MHz
UHF Band	450-470 MHz
"T" Band	470-512 MHz

Size:
10⅝" W × 3½" H × 8" D

Weight:
5 lbs.

Power Requirements:
110-130 V ac, 60Hz, 15 Watts
12-15 V dc, 8 Watts

Audio Output:
2.0 W rms

Antenna:
Telescoping (supplied)

Sensitivity:
0.6 μV for 12dB SINAD on L & H bands
μ bands slightly less
1.0 μV for 10dB SINAD 60% modulation on aircraft

Scan Rate:
5 or 15 channels per second

Connectors:
External antenna; external speaker; AC Power; DC Power

Accessories: (included)
Mounting bracket and hardware; DC cord

Specifications are typical and subject to change without notice.

Bearcat® Synthesized Models

	150	160	210XL	220	250	300	350
Channels	10	16	18	20	50	50	50
Band Coverage	5	5	6	7	6	7	7
Low VHF	yes	yes	yes	yes	yes	yes	yes
High VHF	yes	yes	yes	yes	yes	yes	yes
UHF	yes	yes	yes	yes	yes	yes	yes
70CM Ham	yes	yes	yes	yes	yes	yes	yes
UHF-T	yes	yes	yes	yes	yes	yes	yes
Amateur Ham		yes	yes	yes	yes	yes	yes
AM Aircraft				yes		yes	yes
Scan Speed	16	5/15cps	5/15cps	5/15cps	5/15cps	5/15cps	5/15cps
Decimal Display	yes	yes	yes	yes	yes	yes	yes
Rolling Zeros	yes		yes	yes	yes	yes	
Manual Scan Control	yes	yes	yes	yes	yes	yes	yes
Automatic Lock-Out	yes	yes	yes	yes	yes	yes	yes
Single Antenna	yes	yes	yes	yes	yes	yes	yes
Keyboard Entry	yes	yes	yes	yes	yes	yes	yes
Scan Delay	yes	yes	yes	yes	yes	yes	yes
Automatic Squelch			yes	yes	yes	yes	yes
Front-mounted Speaker			yes	yes	yes		yes
Track Tuning	yes	yes	yes	yes	yes	yes	yes
Direct Channel Access	yes	yes	yes	yes	yes	yes	yes
Automatic Search		yes	yes	yes	yes	yes	yes
Search/Store					yes		
Search/Recall					yes		
Service Search						yes	
Aircraft Search				yes		yes	
Marine Search				yes		yes	
Frequency Count					yes	yes	
Priority function		yes		yes	yes	yes	yes
Auxiliary feature		yes			yes	yes	yes
Electronic Clock					yes	yes	
Power	AC only	AC only	AC/DC	AC/DC	AC/DC	AC/DC	AC/DC
Audio Output (rms)	0.8W	0.8W	2.0W	2.0W	2.0W	2.50W	2.0W

Bearcat® Crystal Models

	ThinScan	Four-Six ThinScan	III	5	12
Channels	4	6	8	8	10
Band Coverage	2	4	1 or 2	4	5
Low VHF	yes	yes	yes	yes	yes
High VHF	yes	yes	yes	yes	yes
UHF	yes	yes	yes	yes	yes
UHF-T	yes	yes	yes	yes	yes
Amateur Ham			yes		yes
AM Aircraft	yes				
800 MHz					
Interchangeable Modules			yes		
Scan Speed	8cps	15cps	25cps	16cps	20cps
Light-emitting Diodes	yes	yes	yes	yes	yes
Single Man./Scan Switch	yes	yes	yes	yes	yes
Channel Lock-outs	yes	yes	yes	yes	yes
Single Antenna	yes	yes	yes	yes	yes
Scan Delay	yes	yes		yes	yes
Automatic Squelch					yes
Front-mounted Speakers	yes	yes	yes	yes	yes
Track Tuning		yes(UHF)	yes		yes
Power	DC	DC	AC/DC	AC	AC/DC
Audio Output (rms)	0.1W	0.1W	2.5W	0.6W	2.0W

Electra Company
Division of Masco Corp. of Indiana
300 East County Line Road
Cumberland, Indiana 46229

International Business Office
Suite 102 • 1828 Swift
North Kansas City, Missouri 64116
Telex 426145 ELECTRA NKSC

MADE IN CUMBERLAND, IN U.S.A. UNDER ONE OR MORE OF THE FOLLOWING PATENTS
3,961,261 3,962,644 4,027,251 4,092,594 4,100,497 4,123,715
and patents pending

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uniden®

Bearcat®

BC 200XLT

200 CHANNEL PROGRAMMABLE HAND HELD SCANNER

- 200 CHANNELS
- 12 BAND COVERAGE
- CRYSTAL FREE
- AUTOMATIC SEARCH
- PRIORITY CHANNEL
- SELECTIVE SCAN DELAY
- DISPLAY LIGHT
- AUTOMATIC LOCKOUT
- TRACK TUNING
- DIRECT CHANNEL ACCESS

OPERATING GUIDE

Bearcat® 220

Bearcat® 220 Features:

- **20 Channels/2 banks**—Scan up to 20 frequencies at once or either of two banks of 10 channels.
- **7 Band Coverage**—Includes Low, High, UHF and UHF-T public service bands, the 2-meter and 75CM amateur (Ham) band, plus the Aircraft band.
- **Automatic Search**—Seek and find new, exciting frequencies.
- **Aircraft Search**—Automatically search the Aircraft band.
- **Marine Search**—Search Marine frequencies by pressing one button.
- **Priority**—Samples designated priority frequency on channel 1 every 2 seconds.
- **Limit**—Sets upper and lower frequencies of search range.
- **Speed**—Choice of either 5 or 15 channels per second scan and search speed for closer monitoring of desired frequencies.
- **Automatic Lockout**—Locks out channels and "skips" frequencies not of current interest.
- **Selective Scan Delay**—Adds a two-second delay on desired channels to prevent missing transmissions when "calls" and "answers" are on the same frequency. Patented by Electra.
- **Simple Programming**—Simply punch in the frequency you wish to monitor.
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- **Rolling Zeros**—This *Bearcat* exclusive tells you which channels your scanner is monitoring.
- **AC/DC**—Operates at home or in authorized vehicle.
- **UL Listed/FCC Certified**—Tested for safe, quality design and manufacture.

Bearcat® 220 Specifications

Frequency Reception Range

Low Band	30- 50 MHz
Aircraft	118-136 MHz
"Ham" Band	144-148 MHz
High Band	148-174 MHz
75CM "Ham"	420-450 MHz
UHF Band	450-470 MHz
"T" Band	470-512 MHz

Size:
10⅝" W × 3½" H × 8" D

Weight:
5 lbs.

Power Requirements:
110-130 V ac, 60Hz, 15 Watts
12-15 V dc, 8 Watts

Audio Output:
2.0 W rms

Antenna:
Telescoping (supplied)

Sensitivity:
0.6 μV for 12dB SINAD on L & H bands
μ bands slightly less
1.0 μV for 10dB SINAD 60% modulation on aircraft

Scan Rate:
5 or 15 channels per second

Connectors:
External antenna; external speaker; AC Power; DC Power

Accessories: (included)
Mounting bracket and hardware; DC cord

Specifications are typical and subject to change without notice.

Bearcat® Synthesized Models

	150	160	210XL	220	250	300	350
Channels	10	16	18	20	50	50	50
Band Coverage	5	5	6	7	6	7	7
Low VHF	yes	yes	yes	yes	yes	yes	yes
High VHF	yes	yes	yes	yes	yes	yes	yes
UHF	yes	yes	yes	yes	yes	yes	yes
70CM Ham	yes	yes	yes	yes	yes	yes	yes
UHF-T	yes	yes	yes	yes	yes	yes	yes
Amateur Ham		yes	yes	yes	yes	yes	yes
AM Aircraft				yes		yes	yes
Scan Speed	16	5/15cps	5/15cps	5/15cps	5/15cps	5/15cps	5/15cps
Decimal Display	yes	yes	yes	yes	yes	yes	yes
Rolling Zeros	yes		yes	yes	yes	yes	
Manual Scan Control	yes	yes	yes	yes	yes	yes	yes
Automatic Lock-Out	yes	yes	yes	yes	yes	yes	yes
Single Antenna	yes	yes	yes	yes	yes	yes	yes
Keyboard Entry	yes	yes	yes	yes	yes	yes	yes
Scan Delay	yes	yes	yes	yes	yes	yes	yes
Automatic Squelch			yes	yes	yes	yes	yes
Front-mounted Speaker			yes	yes	yes		yes
Track Tuning	yes	yes	yes	yes	yes	yes	yes
Direct Channel Access	yes	yes	yes	yes	yes	yes	yes
Automatic Search		yes	yes	yes	yes	yes	yes
Search/Store					yes		
Search/Recall					yes		
Service Search						yes	
Aircraft Search				yes		yes	
Marine Search				yes		yes	
Frequency Count					yes	yes	
Priority function		yes		yes	yes	yes	yes
Auxiliary feature		yes			yes	yes	yes
Electronic Clock					yes	yes	
Power	AC only	AC only	AC/DC	AC/DC	AC/DC	AC/DC	AC/DC
Audio Output (rms)	0.8W	0.8W	2.0W	2.0W	2.0W	2.50W	2.0W

Bearcat® Crystal Models

	ThinScan	Four-Six ThinScan	III	5	12
Channels	4	6	8	8	10
Band Coverage	2	4	1 or 2	4	5
Low VHF	yes	yes	yes	yes	yes
High VHF	yes	yes	yes	yes	yes
UHF	yes	yes	yes	yes	yes
UHF-T	yes	yes	yes	yes	yes
Amateur Ham			yes		yes
AM Aircraft	yes				
800 MHz					
Interchangeable Modules			yes		
Scan Speed	8cps	15cps	25cps	16cps	20cps
Light-emitting Diodes	yes	yes	yes	yes	yes
Single Man./Scan Switch	yes	yes	yes	yes	yes
Channel Lock-outs	yes	yes	yes	yes	yes
Single Antenna	yes	yes	yes	yes	yes
Scan Delay	yes	yes		yes	yes
Automatic Squelch					yes
Front-mounted Speakers	yes	yes	yes	yes	yes
Track Tuning		yes(UHF)	yes		yes
Power	DC	DC	AC/DC	AC	AC/DC
Audio Output (rms)	0.1W	0.1W	2.5W	0.6W	2.0W

Electra
Electra Company
Division of Masco Corp. of Indiana
[illegible]
International Business Office
Suite 102 • 1528 Swift
North Kansas City, Missouri 64116
Telex 426145 ELECTRA NKSC

MADE IN CUMBERLAND, IN U.S.A. UNDER ONE OR MORE OF THE FOLLOWING PATENTS
3,961,261 3,962,644 4,027,251 4,092,594 4,100,497 4,123,715
and patents pending

[illegible] Masco Corporation of Indiana
Printed in U.S.A. 78-193R-1/1

Birdies

All radios are subject to receiving undesired signals. If the BC 200XLT stops during scan mode and no sound is heard, it may be receiving a "Birdie". Birdies are internally generated signals inherent in the electronics of all the receivers. Press the Scan key to continue scanning.

Frequency Allocations

Because of the short-range nature of VHF and UHF communications, frequencies allocated to services in one geographical location will not be heard more than 25-50 miles distance (an exception is "skip" when signals bounce back to earth from the ionosphere). For this reason a separate frequency must be compiled for each local monitoring area.

Most standard frequency separations and classifications are regulated in the United States by the FCC. Block allocations and even some discrete frequencies are not necessarily active in your area. Uniden provides an eastern or western regional directory and a local listing of active frequencies. See the Optional Accessories section for more information.

Abbreviations

The following is a list of abbreviations used to identify the organizations in the frequency allocations.

Police	P.D.
State Police	St. P.D.
Fire Department	F.D.
Special Emergency	Sp. Emer.
Highway Maintenance	Hwy.
Forestry-Conservation	Fors. Cons.
Government	Govt.
Local Government	L. Govt.
Business Radio	Bus.
Broadcast Remote	BC. R
Manufacturers	Mfg.
Mobile Telephone	Mob. Tel.
Radio Paging	Page
Special Industrial	Sp. Ind.
Motion Picture	Mot. P.
Petroleum	Pet.
Power Utilities	Power
Railroad	R.R.
Forest Products	For. Prod.
Automobile Emergency	Auto Emer.
U.S. Weather Bureau	U.S.W.B.
Red Cross	Red Cross
U.S. Coastal & Geodetic Survey	U.S.C.G.S.
National Parks	Nat. Pk.
Bureau of Reclamation	Bur. Reclt.
Indian Affairs	Indian Affairs
Department of Agriculture & Forestry	Agr. & For.
Land Transportation	Land Tr.

Frequency Allocations

29 MHZ BAND

29.00 - 29.70	10 HAM
29.70 - 29.80	For. Prod.
29.80 - 30.00	Aero
30.58 - 30.62	Sp. Ind.
30.01 - 30.58	Govt.
30.58 - 31.24	Ind. (Pet. Fors. Cons. Bus., For. Prod.)
31.26 - 31.38	Sp. Ind., Fors. Cons.
30.02 - 30.30	Hwy. Sp. Emer., Bus.
33.02 - 33.16	Govt.
33.18 - 33.38	Pet.
33.42 - 33.98	F.D.
34.00 - 35.00	Govt.
35.22 - 35.66	Mob. Tel. & Page
35.02 - 35.18	Bus.
35.70 - 36.18	Govt.
36.22 - 36.38	Sp. Ind. & Bus.
36.00 - 37.00	Govt.
37.02 - 37.44	F.D., P.D. & L. Govt.
37.45 - 37.86	Power
37.90 - 37.98	Hwy. & Sp. Emer.
38.00 - 39.00	Govt.
39.02 - 39.38	P.D. L. Govt.
39.40 - 42.00	Govt.
42.02 - 42.94	P.D. L. Govt.
42.96 - 43.18	Sp. Ind. & Bus.
43.22 - 43.66	Mob. Tel., Page
43.70 - 44.60	Trucks, Bus.
44.62 - 45.06	Sr. P.D., For., Fors., Cons.
45.08 - 45.86	P.D.
45.88 - 46.04	P.D., Hwy., Sp. Emer.
46.06 - 46.50	Govt.
46.52 - 46.58	P.D. L. Govt.
46.60 - 47.00	Govt.
47.02 - 47.40	Sr. Hwy.
47.42 -	Red Cross
47.74 - 48.54	Power
48.44 - 47.86	Sp. Ind., Sp. Emer.
48.56 - 49.36	L. Govt. Pet.
49.40 - 50.00	Govt.
50.00 - 54.00	HAM

Frequency Allocations

118 - 174 MHZ BAND

118.000 - 135.975	Aero
136.00 - 144.00	Govt.
146.000 - 148.000	HAM
148.010	MARS
148.150	CAP
148.155 - 148.20	Mil.
148.290 - 149.790	USN
148.800	Hwy.
150.815 - 150.995	Bus.
151.010 - 151.130	Power
151.145 - 151.475	Fors. Cons.
151.505 - 151.595	Sp. Ind.
151.625 - 151.955	Bus.
152.000 - 152.240	Govt. (RCO)
152.270 - 152.450	Taxi
152.480 - 152.840	Mob. Tel. & Page
152.870 - 152.020	Sp. Ind., Mot. P.
153.050 - 153.440	Pet., For. Prod.
153.770 - 153.710	Power
153.740 - 154.115	F.D., L. Govt.
154.130 - 154.445	F.D.
154.450 - 154.600	Sp. Ind., Tel., Bus.
154.655 - 155.145	P.D., L. Govt., St. P.D.
155.160 - 155.400	Sp. Emer., P.D.
155.625 - 157.425	Marine
157.456 - 157.500	Auto. Emer.
157.530 - 157.710	Taxi
157.740 - 158.100	Mob. Tel. & Page
158.130 - 158.460	Power, For. Prod., Pet.
158.490 - 158.700	Mob. Tel. (RCC)
158.730 - 158.970	P.D., L. Govt.
159.225 - 159.465	Trucks
159.465 - 159.210	P.D., Hwy.
159.510 - 160.200	Trucks
160.215 - 161.565	R.R.
161.600 - 162.000	Marine
162.026 - 162.175	Bus. Rec.
162.400	U.S.W.B.
162.475	U.S.W.B.
162.550	U.S.W.B.
163.125	Indian Affairs
163.175	Bus. Rec.
163.275	U.S.W.B.
163.325	Govt.
163.375	Fors., Cons.
163.384 - 163.538	Mil.
163.625 - 163.975	Govt.
164.025 - 164.075	P.D., R.R.
164.175 - 165.188	Pur. Rec., Nat. Pk.
165.300	F.A.A.
169.450 - 169.725	Govt., Agr. & For.
169.300	Nat. Pk., Ind., Data
170.150	F.D., BC. R.
170.225 - 170.325	U.S.C.G.S.
170.300 - 170.230	U.S.C.G.S.
170.425 - 170.575	Fors., Cons.
170.625 - 171.350	Govt., Sp. Ind.
171.388 - 172.725	Bur. Rec., Fors., Cons., Ind. & Land Tr.
172.775	Spec. Ind.
173.025	Ind., Dept. Ag. & For., Govt.
173.075	U.S.W.B.
173.225	U.S.C.G.S.
171.275	Nat. Pk.

Frequency Allocations

406 - 512 MHZ BAND

406.00 - 420.000	Govt.
420.000 - 450.000	HAM
450.000	Remote Br.
450.050 - 450.950	Pur. Prod., Pet.
451.00 - 451.50	Util.
451.750	For. Prod., Pet.
451.975	Power, Tel. Maint.
452.000 - 452.500	Taxi, Motor Carrier & R.R.
452.525 - 452.600 - Auto Club	BC. R., Motor Carrier
452.625 - 452.975	Govt., L. Govt., P.D. & F.D.
453.000 - 453.975	Govt., P.D. & F.D.
454.000 - 454.975	Mob. Tel. & Page
455.000 - 455.975	Remote Br.
456.000 - 456.975	P.D., F.D.
457.000 - 457.975	Mob. Tel., Page, Domestic Public & Motor Carrier
458.000 - 458.975	Mob. Tel., Page
459.000 - 459.975	Mob. Tel. & Page
460.000 - 460.625	P.D., F.D.
460.650 - 462.175	Bus.
462.200 - 462.450	Taxi
462.550 - 462.725	C.B.
462.750 - 462.975	Bus.
463.000 - 463.175	Medical
463.200 - 464.975	Bus.
465.000 - 467.500	Sp. Ind. & Land Tr.
467.525 - 467.925	P.D., F.D.
467.7375 - 467.7975	C.B.
467.950 - 469.475	Sp. Ind. & Land Tr.

Frequency Allocations

In some large metropolitan areas, 1 or 2 channels of the "TV Band" (470 MHz to 512 MHz) are used for communication purposes. Each TV station (channels 14 through 20) utilizes 6 MHz:

470 - 476 TV	Channel 14
476 - 482 TV	Channel 15
482 - 488 TV	Channel 16
488 - 494 TV	Channel 17
494 - 500 TV	Channel 18
500 - 506 TV	Channel 19
506 - 512 TV	Channel 20

Where these frequencies are assigned for communication purposes, in lieu of a TV station, the 6 MHz segment is allocated as shown here for channel 14 (470 - 476 MHz):

470.0125 - 470.2875	Domestic Public (Base, Mob.), Public Safety
470.3125 - 471.1375	U.S.C.G.S.
471.1425 - 471.2875	Public Safety
471.3125 - 471.4125	Pur., Spec. Ind.
471.4375 - 471.6375	Reserve Pool A
471.6625 - 471.7875	Reserve Pool B
471.8125 - 472.3375	Bus.
472.3625 - 472.4375	Taxi
472.4625 - 472.7875	R.R., Motor Carrier, Public Safety
472.8125 - 472.9875	Pet., For. Prod., Mfg., Motor Carrier, Auto. Emer.
473.0125 - 473.2875	Domestic Public
473.3125 - 473.4875	Reserve Pool A
473.5125 - 474.1375	Public Safety
474.1625 - 474.2875	Reserve Pool B
474.3125 - 474.4375	Pet., For. Prod., Mfg., Motor Carrier, Auto. Emer.
474.4625 - 474.5875	Taxi
474.6125 - 474.7375	R.R., Motor Carrier
474.8625 - 475.0375	Bus.
475.0625 - 475.2375	Reserve Pool B
475.3625 - 475.4375	Taxi
475.4625 - 475.5875	R.R., Motor Carrier, Auto. Emer.
475.8125 - 475.9875	Pet., For. Prod., Mfg.

The same allocation pattern is repeated for each of the TV channels 14 through 20. For example, if channel 17 is assigned for communications in our area, "taxi" would be 490.3625 to 490.4375 and 493.3625 to 493.4375 (corresponding to 472.3625 to 472.4375 and 475.3625 to 475.4375 above). Note that in the example, we added three TV channels (18 MHz to the channel 14 frequencies).

Frequency Allocations

806 - 947 MHZ BAND

806.000 - 816.000	Domestic Public (Mobile)
816.000 - 821.000	Mobile Trunking (Base)
851.000 - 866.000	Base Trunking
866.000 - 869.000	Domestic Public
902.000 - 928.000	Industrial Scientific

Warranty

uniden Bearcat

ONE YEAR LIMITED WARRANTY

WARRANTOR: Uniden America Corporation (UNIDEN®)

ELEMENTS OF WARRANTY: UNIDEN® warrants, for the duration of this warranty, UNIDEN® Bearcat® Scanners (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty shall terminate and be of no further effect one (1) year after the date of the original purchase of the Product or at the time the Product is (A) damaged or not maintained as reasonable and necessary, (B) modified, (C) improperly installed, (D) repaired by someone other than warrantor or a defect or malfunction covered by this warranty, (E) used in a manner or purpose for which the Product was not intended, or (F) sold by the original purchaser.

STATEMENT OF REMEDY: In the event that the Product does not conform to this warranty at any time while this warranty is effective, warrantor shall repair the defect and return it to you without charge for parts, service, or any other costs incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: In the event that the Product does not conform to this warranty, the Product shall be shipped or delivered, freight prepaid, to warrantor at UNIDEN® SERVICE CENTER, 9340 Castlegate Dr., Indianapolis, IN 46256 with evidence of original purchase.

LEGAL REMEDIES: This warranty gives you special legal rights, and you may also have other rights which vary from state to state.

This warranty is void outside the United States of America.

uniden
AMERICA CORPORATION

PAT. UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENT NUMBERS
3,961,261 3,962,644 4,027,251 4,092,594 4,100,497
4,114,103 4,123,715 4,179,662 4,409,688
U.S. AND FOREIGN PATENTS PENDING

UBUD01092C(sx) Printed In The Philippines

CUT

PLACE FIRST CLASS STAMP HERE

uniden®

4700 Amon Carter Boulevard
Fort Worth, Texas 76155

ATTN: PC MARKET RESEARCH DEPARTMENT
Please do not send any products or service related correspondence to this address

Please fold here

23. What types of credit cards do you use?
- ☐ American Express, Diners Club, Carte Blanche
- ☐ Bank Card (Master Card, Visa, etc.)
- ☐ Gasoline Card, Name _____
- ☐ Department Store Card
- ☐ None of the above

24. What type of car(s) do you drive?
- ☐ Compact
- ☐ Mid Size
- ☐ Sports
- ☐ Full Size
- ☐ Station Wagon
- ☐ Van
- ☐ Recreation Vehicle
- ☐ Specialty
- ☐ Motor Cycle
- ☐ Pick Up

25. What magazine(s) do you read?
- ☐ Road & Track
- ☐ Car & Driver
- ☐ Motor Trend
- ☐ Auto Week
- ☐ American Trucker
- ☐ Road King
- ☐ Playboy
- ☐ Sports Illustrated
- ☐ Penthouse
- ☐ Time
- ☐ Newsweek
- ☐ Popular Science
- ☐ Popular Mechanics
- ☐ Consumer Reports
- ☐ People

Thank you for taking the time to complete this questionnaire
If you have any other comments or suggestions please write to

UNIDEN AMERICA CORPORATION
Product Development Dept.
4700 Amon Carter Boulevard
Fort Worth, Texas 76155

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INSTRUCTIONS: Fill out both sides of card.
Fold on dotted line. Fold over flap and seal with glue or paste.

Please fold here

uniden®
Bearcat®

BC 200XLT

200 CHANNEL PROGRAMMABLE HAND HELD SCANNER

- 200 CHANNELS
- 12 BAND COVERAGE
- CRYSTAL FREE
- AUTOMATIC SEARCH
- PRIORITY CHANNEL
- SELECTIVE SCAN DELAY
- DISPLAY LIGHT
- AUTOMATIC LOCKOUT
- TRACK TUNING
- DIRECT CHANNEL ACCESS

OPERATING GUIDE

Installation

Introduction

Welcome to the exciting world of hand held radio scanners. State-of-the-Art engineering and microelectronics provide programmable operation and dependability while minimizing size and power consumption. The keyboard allows you to program any VHF or UHF frequency on all 200 channels; and to control Scan, Lockout, Priority, Delay, Hold, Weather Search and Channel Bank selection as well as the programmable search functions. There is also a keyboard lock function to prevent accidental reprogramming of the unit. An LCD display provides frequency and operation information. There is a built-in light for night time use. The detachable NiCad battery pack provides hours of monitoring and recharges overnight. The case is designed to withstand the tough requirements of the hand held environment, and is built of high impact ABS plastic. There is also a leather case (included) to further protect this scanner. Please read this guide thoroughly before attempting to operate the unit.

Warning: Uniden does not represent this unit to be **waterproofed.** To reduce the risk of fire, electrical shock or damage, do not expose this unit to rain or moisture.

Note: The use of a scanner in a vehicle may be regulated or prohibited in some states. Check with your local authorities before operating a mobile scanner.

Unpacking

Carefully remove all items from the shipping carton. If there is any visible damage or an item appears to be missing, **do not return the unit to the place of purchase.** Please call the Uniden Customer Service Center for information or instructions on any problem you may have: (317) 842-2483 8am-5pm EST, Monday-Friday. The following items are included with your BC 200XLT:

- Bearcat Scanner
- AC Adaptor/Charger
- Flexible Antenna
- Leather Case
- Earphone
- Rechargeable Battery Pack
- Operating Guide including Registration Card (cut out, fill in, and return)

Please keep the shipping carton and packing materials. This carton serves as an excellent method to transport the scanner.

Rechargeable Batteries

The BC 200XLT comes with a rechargeable NiCad battery pack. When fully charged this power supply will provide up to 5 hours of dependable use. To install the battery pack, simply slide it on to the bottom of the scanner.

When the batteries become low, simply plug the AC Adaptor/Charger into the jack on the rear of the battery pack and charge overnight. It is important to periodically allow the batteries to discharge completely to maintain full operating capability. See the Battery Maintenance section of this guide.

Warning: Turn the ON/OFF Volume switch OFF before attaching or detaching the battery pack.

To remove the battery pack from the unit, simply slide it to the left.

Warning: Do not allow the terminals of the battery pack to be shorted. Fire or serious injury may result. Do not place the battery pack in your pocket where keys or other metal objects, etc., may short out the battery terminals.

Flexible Antenna Installation

The BC 200XLT includes a flexible antenna for handheld use. Put the antenna onto the BNC connector on the top of the scanner and turn the antenna connector clockwise 1/4 turn to lock it on. Under normal conditions this antenna should provide excellent reception. However, factors such as location within your home, and proximity to electrical appliances may determine reception quality. For weak signal reception or electrically noisy locations, an external antenna may be helpful. A mating plug (optional) may be required to connect an external antenna.

AC Adaptor

The BC 200XLT can be powered by the AC Adaptor included with the scanner which converts standard household current to 12V DC. Plug the small connector of the AC Adaptor into the jack in the back of the radio marked DC 12V. Plug the other end into any standard 120V AC household outlet.

Note: Please be sure to use only model AD-140U AC Adaptor/charger, or the model PS-001 Cigarette lighter adaptor (optional), as higher voltage, or reverse polarity may damage your unit.

Memory Backup

Frequencies maintained in the BC 200XLT memory are protected from loss by a built-in capacitor which protects the memory for up to 30 minutes when you are replacing the batteries.

Controls and Functions

Controls and Functions

1. **On/Off, Volume** - Turns the unit on, or off, and controls the audio output level.

2. **Squelch** - Eliminates the annoying "rushing" sound that is present between transmissions when no signal is being received. Proper adjustment of this control keeps the receiver quiet and allows scanning until a signal is received.

3. **Scan** - Press to start scanning all frequencies programmed into memory that are not locked out.

4. **Manual** - Press to stop scanning. Press again to manually step to the next channel. Press and hold to rapidly step through the channels. Press the channel number and then the manual key to go directly to a specific channel.

5. **Priority** - The priority key samples the first channel of each selected bank every two seconds regardless of other operational settings. Priority function will be retained in memory.

6. **Hold** - Press to stop and hold the search function on the current frequency. Press again to manually step up to the next frequency. Press and hold to rapidly step up through the search frequencies.

7. **LCD Display** - The LDC display shows the channel number and frequency, the selected bank(s), priority, lockout, delay, weather, keypad lock, and low battery indications.

8. **Weather Search** - The weather key searches all seven NOAA weather frequencies until it locks on the one that is active in your area.

9. **Delay** - The delay key provides a 2 second delay on any channel to receive a reply transmission on the same frequency before resuming search or scan. Delay is retained in memory.

10. **Limit** - Enter the low and high limits of the search range. Press to manually step the search frequency down. Press and hold to rapidly step the search frequency down.

11. **Search** - Press to search for new active frequencies within preset ranges of any band.

12. **Lockout** - Press to lockout the reception of frequencies on selected channels during scanning. Lockout is retained in Press again to deselect lockout.
Note: Channel 1 cannot be locked out if priority has been selected. All other priority channels may be locked out.

13. **Numeric Keypad** - ("0–9" and ".") Used to program all frequencies into memory and for direct channel access. During the scan mode these keys are utilized to select or deselect any of the 10 memory banks.

14. **Enter** - The "E" key is used to enter frequencies into the scanning memory.

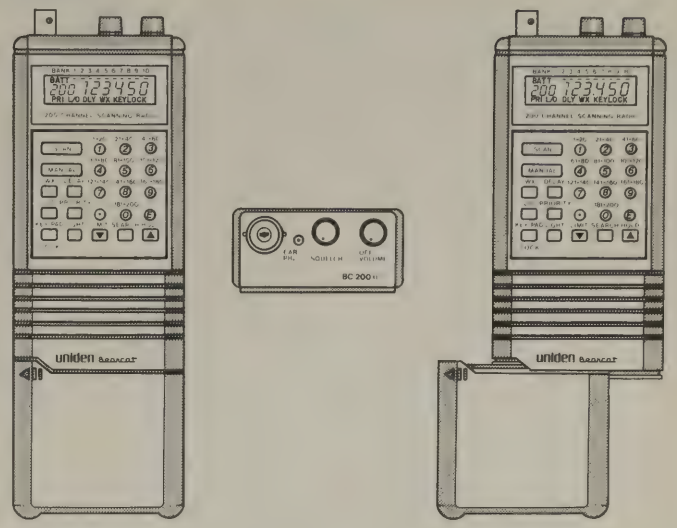
15. **Keypad Lock** - This unique feature is used to lock the keypad to prevent accidental entries. To lock the keypad, press once. To unlock, press again.

16. **Light** - Press to turn the display light on for 15 seconds. Pressing this button again while the light is on will turn it off.

17. **Earphone** - The earphone jack allows you to use an earphone for privacy or in case of a high noise environment.

Operation

Operation



The BC 200XLT has 200 memory channels, each of which can be programmed to store one frequency. The channels are divided into 10 – 20 channel banks, useful for storing similar frequencies in order to maintain faster scanning cycles. When scan is pressed, each of the programmed frequencies within a selected bank will be sampled for a transmission (locked channels will be skipped) at the rate of about 15 channels per second. If an active frequency is found the unit will stop and monitor that frequency until there is no longer any activity. A two second delay can be added to each channel and will allow the unit to monitor the frequency for a return or continued transmission. If, after two seconds, the frequency remains inactive, the scanning cycle will resume.

When the unit is first turned on, each channel will contain "000.000". When new frequencies are programmed, the old will be erased. If an invalid frequency is entered, "Error" will be displayed and the old frequency will return.

To operate the scanner make sure that the batteries are charged or power is correctly connected to the unit. Turn the volume control on and adjust the desired level. Adjust the squelch by turning the knob fully clockwise until a rushing sound is heard. Turn the knob back until the receiver is silent. After the channels have been programmed, operation is simple. Press the scan key to scan all the channels. While the receiver is scanning channels, pressing one of the number keys will turn a bank of 20 channels on or off. The black lines at the top of the LCD display show you which banks are selected. If a bank is already selected, (shown by a black line under the bank number) pressing the corresponding button will deselect that bank. Press the manual key to stop scanning. Repeatedly pressing the manual key will step through the channels in order.

LCD Display

The BC 200XLT has a backlit display which shows the current channel and frequency as well as other operational modes. When the unit is scanning, the channel number will rapidly advance while the frequency display will go blank. When the scanner is stopped the current channel and frequency will again be displayed. When frequencies are programmed the display will show the digits as they are entered. The display will also show "PRI" when the priority mode is on, "L/O" whenever a channel appears that has been locked out, and "DLY" whenever a channel has been programmed for delay. Across the top of the display, a series of dashes under the numbers 1-10 will be present. These are the bank indicator numbers. These are selected or deselected during the scan sequence by the use of the numeric pad.

Programming

To program a frequency into a channel, press the digits of that frequency including the decimal point and then, press the enter key. If an invalid frequency is entered, the display will show "Error". To change a frequency enter the new one and the old one will be erased.

To program 162.550 into channel 2:
Press 2MAN Press 162.550E

To program 471.2375 into channel 7:
Press 7MAN Press 471.2375E

Multiple Entries - When you press the "E" key to enter the same frequency in a different channel the LCD will show the channel number of the current frequency "Ch 45". If you want to repeat that frequency in the new channel press the "E" key again. That frequency will now be programmed in both channels. You can repeat a frequency as many times as desired.

Features

The following is a brief description of the operational features of the BC 200XLT.

Manual Channel Selection - To manually select a channel press the manual key repeatedly until the desired channel number appears in the display. If you have deselected any of the banks it will be impossible to access any of those channels manually until you have selected the particular bank in which your channel exists. Press and hold the manual key to rapidly step through the channels.

or

Press the channel number you wish to access, then press the manual key. The scanner will automatically advance to the desired channel regardless of the bank status.

Lockout - Select the channel to be skipped. Press the lockout key. The lockout indicator will appear in the display whenever that channel also appears. To take lockout off press the lockout key on that channel.
Note: If priority is selected, channel 1 will not be able to be locked out. All other priority channels may be locked out.

Priority - When it is important to keep track of the activity on one frequency while listening to others, the priority function should be used. Program the important frequency into the first channel of any bank. Press the priority key to activate the priority function. Every 2 seconds the unit will check the first channel of all selected banks for activity (the priority indicator will appear in the display). If a transmission is found the unit will monitor that channel. If no signal is found, the unit will return to the previous channel and function. Press the priority key again to turn off the priority function.

Search - Use the search mode to look for new active frequencies within the bands of your scanner.

Enter the lower limit frequency on the keypad and press the limit key;

Enter the higher limit frequency and press the limit key again;

These two frequencies set the range that the unit will search. Press the search key to start searching. If an active frequency is found the scanner will stop to monitor the signal. Press the hold key to hold the search on this frequency. Press the hold key again to step up to the next frequency or press the limit key to step down to the previous frequency. If you press and hold down either the Hold or Limit keys, you will rapidly step through the search frequencies. (Step up with the Hold key, and step down with the Limit key.) When the signal stops or if you press the search key, the unit will continue searching. Press the manual key to leave the search mode.

Low Battery Indicator

The BC 200XLT has a low battery indicator to let you know when your battery needs to be recharged. When the BATT indicator on the LCD display starts to blink, it means that the battery pack needs to be charged. After the low battery indicator has been blinking for about ten minutes, the scanner will shut itself off to prevent the batteries from becoming completely discharged. See the section of this manual on Battery Maintenance for more information.

Helpful Hints

Helpful Hints

The BC 200XLT is a high quality electronic radio receiver. The following hints should help you understand and enjoy your unit.

1. Make sure the unit is turned off before removing the battery pack. You may want to record the programmed frequencies before doing this in case memory is lost.

2. If memory is lost, simply reprogram each channel. Memory loss will be indicated by unfamiliar frequencies in each channel.

3. If strong interference or electrical noise is received, you may need to relocate your scanner. A higher elevation such as the second floor may provide better reception. An external antenna may also be required.

4. Whenever the keypad is used it is important to press firmly on the center of each key.

5. Do not use the scanner in high moisture environment such as the kitchen or the bathroom.

6. Clean the outside of the cabinet with a mild detergent. Do not use abrasive cleansers or solvents. Be careful not to rub LCD window area.

7. There are no user serviceable parts inside with the exception of the battery pack. Do not attempt any repairs except replacing batteries.

Battery Maintenance

NiCad batteries can develop a condition known as "memory". This condition can limit the amount of battery power available. To avoid this condition, the following battery maintenance steps should be practiced:

1. Every 2 - 3 months the scanner should be left on to drain all battery power. Be sure to write down the programmed frequencies for reprogramming when the batteries are charged.

2. Recharge the batteries for 14 — 16 hours to insure a full charge.

3. Do not leave the charger plugged in for long periods of time. Do not recharge the unit unless it needs it.

Trouble Shooting

If your BC 200XLT is not performing up to your expectations, try the steps listed below. If you cannot get satisfactory results please call the Uniden Customer Service Center for assistance:

(317) 842-2483 8am - 5pm EST, Monday-Friday.

1. Scanner is not working properly.
   A. Check the power connections.
   B. Check the volume and squelch.
   C. Make sure programming is correct.

2. Signal is weak or distorted.
   A. Check antenna connection.
   B. Check proper frequencies.
   C. Make sure frequency is active.

3. Improper reception.
   A. Check proper frequencies.
   B. Reposition radio.
   C. Check antenna connection.

4. Scan won't stop.
   A. Check squelch adjustment.
   B. Check proper frequencies.
   C. Check antenna connection.
   D. Check lockout.

5. Incomplete reception.
   A. Fringe area of reception.
   B. Check squelch adjustment.

6. Keypad won't work.
   A. Check keypad lock switch.

7. Priority won't work.
   A. Check squelch adjustment.
   B. Improper frequency in Channel 1.

Optional Accessories

The following accessories are available for your BC 200XLT at your local Uniden Dealer or from the Uniden Customer Service Center:

(317) 842-2483 8am-5pm EST, Monday-Friday.

PS-001 Vehicle Power Cord - This power cord is designed for use with the BC 200XLT in a vehicle. This heavy duty cord comes complete with a cigarette lighter connector and fuse.

AD-140U Replacement AC Adaptor

AT-094 Flexible Antenna - Replacement antenna for the BC 200XLT.

BP-200 Extra Battery Pack - For heavy use get an extra battery pack for your BC 200XLT. Then, one can be charging while the other is in use.

Specifications

Betty Bearcat Frequency Directory - You can get much more out of your scanner with one of the Betty Bearcat Frequency Directories. Tens of thousands of verified frequencies for police, fire, emergency, aircraft, railroad, and many other services. When you turn to your local area you will find new active frequencies full of exciting action. There is a directory for the eastern states and western states, and a local frequency listing.

FBE - Eastern USA including all areas in the eastern time zone.

FBW - Western USA including central and western time zones.

LFL - Local listing of active frequencies in your area only.

Note: The use of a scanner in a vehicle may be regulated in some states. Check with your local authorities before operating a mobile scanner.

Specifications

Band Coverage:	11 Bands + Weather	
Frequency Range:	10 Meter "Ham"	29.0-29.7 MHz
	Low Band	29.7-50.0MHz
	6 Meter "Ham"	50.0-54.0 MHz
	Aircraft	118-136 MHz
	Military Land Mobile	136-144 MHz
	2 Meter "Ham"	144-148 MHz
	High Band	148-174 MHz
	Federal Government	406-420 MHz
	70cm "Ham"	420-450 MHz
	UHF Band	450-470 MHz
	"T" Band	470-512 MHz
	800 Band	806.0000-823.9875 MHz (1) 849.0125-868.9875 MHz (2) 894.0125-956.0000 MHz (3)
Channels:	200 Channels (10-20 channel banks)	
Scan Speed:	15 channels per second (scanning) 25 frequencies per second (search mode)	
Display:	Illuminated Liquid Crystal	
Power Requirement:	12V DC (internal battery, AC Adaptor or vehicle adaptor)	
Sensitivity: (nominal) (12dB SINAD)	29-54 & 136-174 MHz = 0.4 microvolts 118-136 MHz = 0.8 microvolts (60%AM) 406-512 MHz = 0.5 microvolts 806-956 MHz = 1.0 microvolts	
Selectivity:	-55dB @ ±25 KHz	
Audio Output:	480 milliwats maximum	
Antenna:	flexible antenna included	
Connectors:	antenna, earphone, DC power	
Size:	2¹/₄"W x 7¹/₂"H x 1¹/₄"D	
Weight:	1 lb., 4 oz.	

Certified in accordance with FCC rules and regulations part 15 as of date of manufacture.

Specifications are typical and subject to change without notice.

CUT

uniden BC 200XLT PRODUCT REGISTRATION CARD

Thank you for choosing a Uniden® Personal Communications product. You have chosen one of the most sophisticated, technologically advanced electronic products available. Please fill out the requested information on this card so that we can better understand our customers and their needs. With this information we can plan new products, advertising, and guide our customer service programs. Thanks for your help.

1. ☐ **Mr. 2.** ☐ **Mrs. 3.** ☐ **Ms. 4.** ☐ **Miss**

5. First Name **6. Initial** **7. Last Name**

8. Street **9. Apt. No.**

10. City **11. State** **12. Zip**

13. Date of Purchase Mo. Day Yr

14. Serial No.

15. Is this the first ~~Bearcat~~ you have purchased or received as a gift?
YES ☐ NO ☐

16. If NO, please specify brand and model number purchased.
A. _____
B. _____
C. _____

17. Where did you purchase the product?
☐ Department Store
☐ Discount Store
☐ Catalog Showroom
☐ Electronics Specialty Store
☐ Local Electronics Dealer
☐ Mail Order
☐ Gift
☐ Truck Stop

18. How did you become aware of this product?
☐ TV Advertisement
☐ Magazine Advertisement
☐ Newspaper Advertisement
☐ Store Display
☐ Friend's Recommendation
☐ Salesperson's Recommendation
☐ Previous Use

19. Please check two fo the factors that most influenced your purchase of this product.
☐ Style or Appearance
☐ Price
☐ Uniden Reputation
☐ Warranty
☐ Previous Use
☐ Features
☐ Quality

20. Please check your age category
☐ Under 20
☐ 20-25
☐ 26-30
☐ 31-35
☐ 36-40
☐ 41-45
☐ 46-50
☐ 51-55
☐ 56-60
☐ 61-65
☐ 66-Over

21. Occupation
☐ Homemaker
☐ Teacher/Educator
☐ Professional Driver
☐ Executive/Administrator
☐ Civil Servant
☐ Sales/Marketing
☐ Clerical
☐ Farmer/Agriculture
☐ Military
☐ Technical/Professional
☐ Business/Professional
☐ Craftsworker
☐ Machine Operator/Laborer
☐ Retired
☐ Student

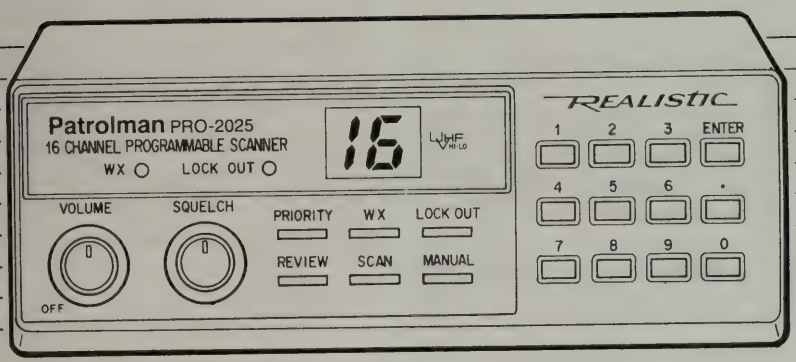
22. Please check your approximate family income.
☐ Under $10,000
☐ $10,000-19,999
☐ $20,000-29,999
☐ $30,000-39,999
☐ $40,000-49,999
☐ $50,000-59,999
☐ $60,000 & Over

PRO-2025

16-Channel Direct Entry Programmable Scanner

OWNER'S MANUAL

Please read before using this equipment



Cat. No. 20-146

REALISTIC®

INTRODUCTION

Your new Realistic PRO-2025 16-Channel Direct Entry Programmable Scanner lets you in on all the action! This scanner gives you direct access to over 20,000 exciting frequencies that include the police department, fire department, ambulance, amateur radio, and transportation services. You can select up to 16 channels for your scanner to scan and you can change your selection at any time.

The secret to your scanner's ability to scan so many frequencies is its custom-designed microprocessor — a tiny, built-in computer. Your scanner's microprocessor also gives your scanner these special features:

Digital Channel Display — makes the channel number easy to read.

Automatic Two-Second Scan Delay — helps to prevent the loss of replies on a channel while you are scanning.

Memory Backup — keeps the channel frequencies stored in your scanner's memory for up to sixty days, even if the power switch is in the off position.

Lock-Out Function — lets your scanner skip over specified channels.

Priority Channel — helps keep you from missing important calls on Channel 1.

Weather Band Key — lets your scanner scan the preprogrammed weather frequencies to keep you informed of the most current weather conditions.

Your scanner covers all of these bands:

- 29-29.7 MHz (ham radio 10 m)
- 29.7-50 MHz (VHF Lo)
- 50-54 MHz (ham radio 6 m)
- 136-144 MHz (government)
- 144-148 MHz (ham radio 2 m)
- 148-174 MHz (VHF Hi)
- 406-450 MHz (ham radio and government)
- 450-470 MHz (UHF Lo)
- 470-512 MHz (UHF Hi)

Note: Mobile use of scanners might be unlawful or require a special permit in certain areas. Check with your local authorities for current regulations. Radio Shack assumes no responsibility for the use of this scanner in such areas.

For your permanent records, we urge you to record the serial number of your scanner in the space provided below. You will find the serial number on the back panel of the scanner.

Serial Number: _____

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All Rights Reserved.
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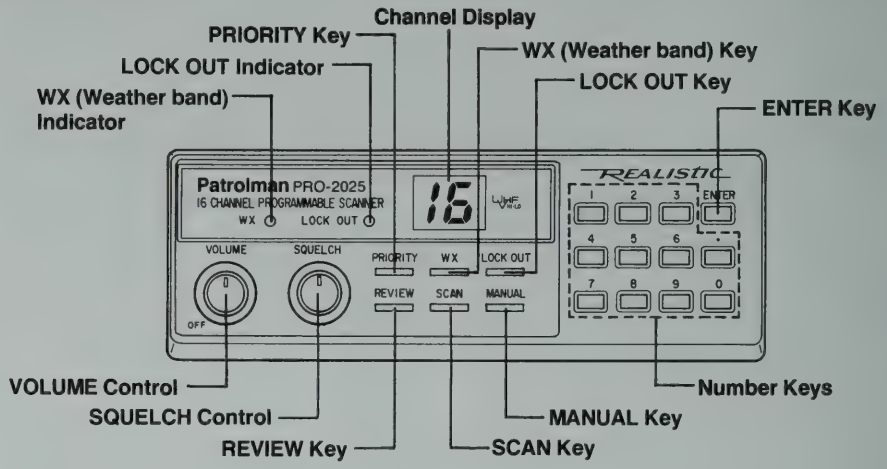
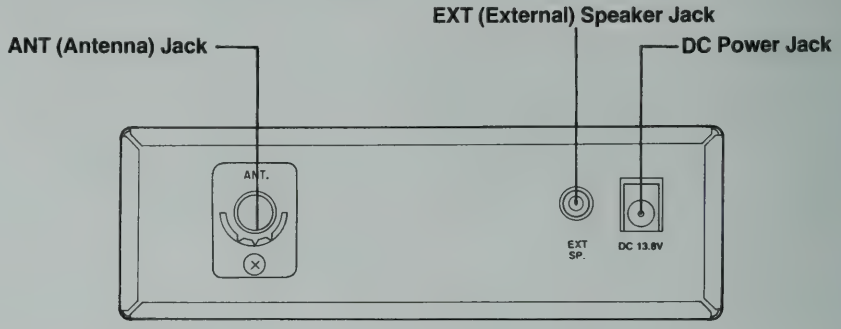
A QUICK LOOK AT YOUR PRO-2025

FRONT PANEL



REAR PANEL

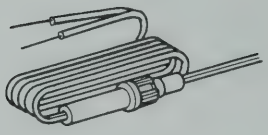


ACCESSORIES

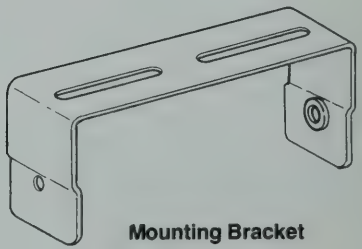
Two Lock Washers

Two Self-tapping Screws

Two Mounting Knobs



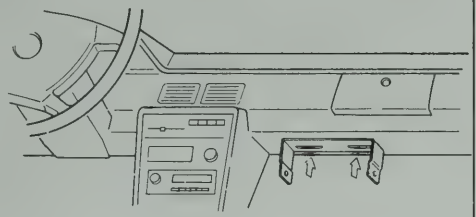
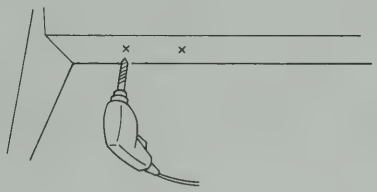
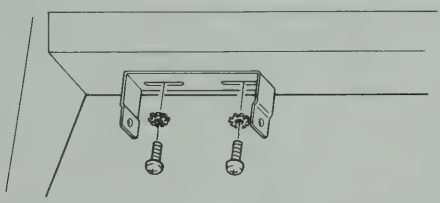
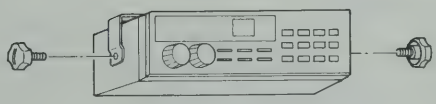
Power Cord



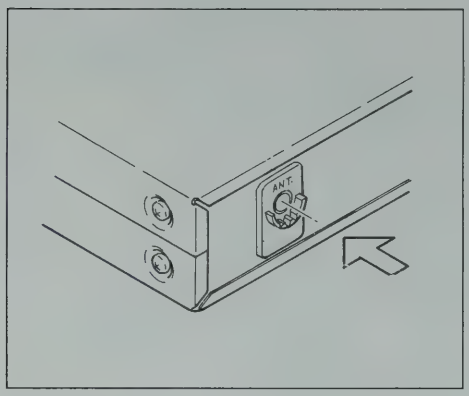
Mounting Bracket

MOUNTING THE SCANNER

The most common mounting location for this scanner is under your vehicle's dashboard. When choosing a location, be sure the scanner is easy to reach, all cables are clear of the vehicle pedals or other moving parts, and the radio is not directly in front of heating vents. Also, be sure that the radio is located so that the passengers have enough leg room.

1. Choose a mounting location. Then, use the mounting bracket as a template to mark the positions for the mounting screw holes.	
2. In the marked positions, drill holes slightly smaller than the screws. Take care not to drill into or damage objects behind the mounting surface.	
3. Attach the bracket using the supplied self-tapping screws and lock washers, as shown.	
4. Attach the radio to the bracket using the mounting knobs.	

CONNECTING THE ANTENNA



Obtain the magnet-mount mobile all-band antenna (Cat. No. 20-012). Follow the instructions provided with the antenna for installation.

For best results, mount the antenna:

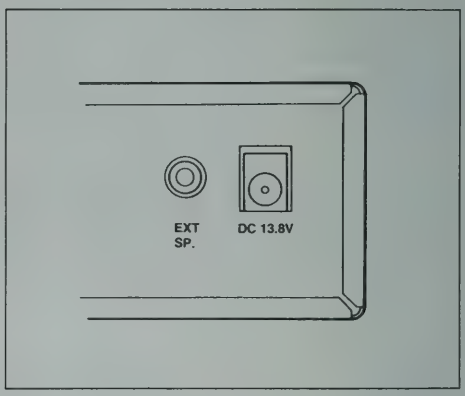
- As high as possible on the vehicle
- In a vertical position

After you mount the antenna, route the antenna's cable to the scanner and connect the cable to the scanner's ANT jack.

Cautions:

- Do not run the cable over sharp edges or moving parts that could damage the cable.
- Do not run the cable next to power cables or other antenna cables.
- Do not run the cable through areas in the engine compartment that produce extreme heat.

USING AN EXTERNAL SCANNER SPEAKER

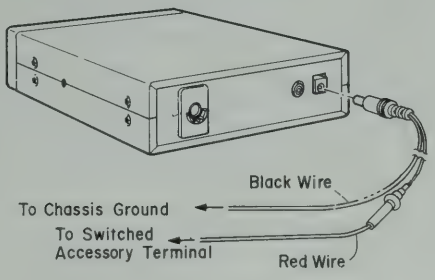


You can connect an external speaker to the scanner. Use a speaker with a 1/8-inch plug, such as Radio Shack Cat. No. 21-549. Insert the plug into the EXT SP. jack on the back of the radio.

CONNECTING TO POWER

We designed your scanner for connection to 13.8-volt power systems. The red and black wires on the power cord packed with your scanner are for power connections.

1. Plug in the single connector end of the power cord to the DC Power jack on the scanner's back panel.
2. Connect the red wire (with the in-line fuse holder) to a terminal that provides power only when you turn the ignition to ON or ACC.
3. Connect the black wire to a metal part of the vehicle's frame (chassis ground).



Note: Modern vehicles have many non-metallic parts. If you connect the black wire to a non-metallic part, or if a nonmetallic part insulates the wire from the vehicle's chassis, the scanner does not work.

HOME INSTALLATION

We designed your scanner for mobile use However, you can also use it in your home. For home installation, you need the following:

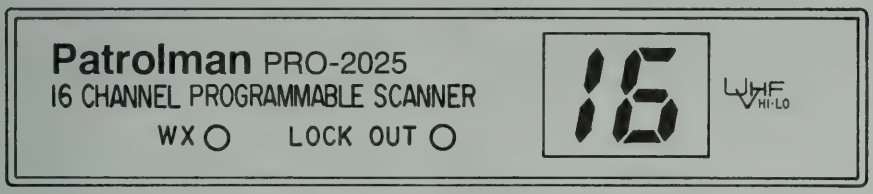
- 12-volt DC adapter (Cat. No. 273-1653)
- Antenna — you can use a simple back-of-set telescoping antenna such as Cat. No. 20-161. To achieve best reception, attach an all-band outdoor antenna.
- External Speaker (Cat. No. 21-549)

1. Properly mount the antenna and speaker.
2. Connect the antenna to the scanner's ANT jack.
3. Connect the external speaker to the scanner's EXT SP jack.
4. Connect the adapter's green barrel plug to the adapter's cord and set the barrel plug's tip to POS (positive).
5. Insert the barrel plug into the scanner's DC 13.8V jack.
6. Plug the adapter's AC power cord into a standard AC outlet.

Warning: When installing or removing outdoor antennas, use extreme caution. If the antenna starts to fall, let it go! It could contact overhead power lines. If the antenna touches the power line, contact with the antenna, mast, cable, or guy wires can cause electrocution and death. Call the power company to remove the antenna. DO NOT attempt to do so yourself.

UNDERSTANDING YOUR SCANNER

A LOOK AT THE DISPLAY AND INDICATOR

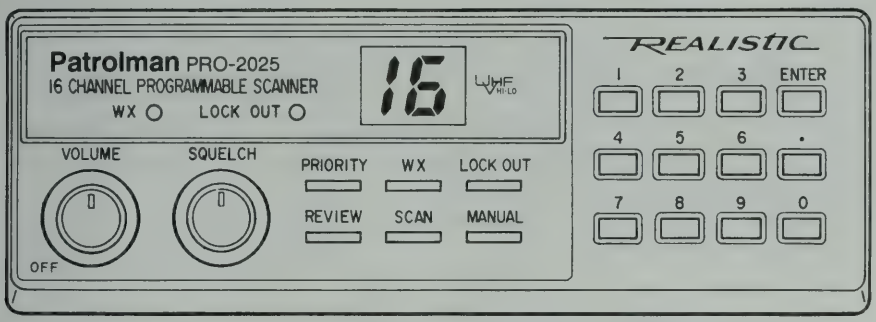


WX Indicator — lights when the scanner is in the weather mode. Flashes when searching for the active weather channel in your area.

LOCK OUT Indicator — lights when you lock a channel out of the scan mode. See "Locking Out Channels."

Channel Display — normally shows the current channel. E appears when you make an incorrect/invalid entry. P appears when the scanner is in the priority mode. When you program the frequencies or press [REVIEW], the display shows each digit of the frequency being programmed, one at a time. The decimal point is displayed as a dash (—).

A LOOK AT THE KEYBOARD



PRIORITY — turns the priority feature on or off for Channel 1.

WX — causes your scanner to scan through the weather channels.

LOCK OUT — turns on the lock-out function. See "Locking Out Channels."

REVIEW — displays the frequency of the current channel, one digit at a time.

SCAN — causes your scanner to scan through the programmed channels.

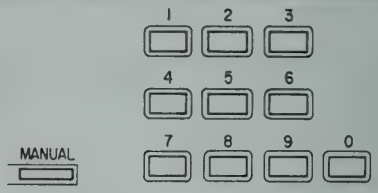
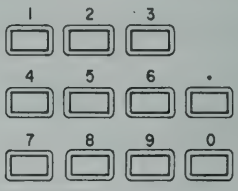
MANUAL — stops the scanning and lets you directly enter a channel number.

Number Keys — used to enter a channel number or a frequency.

ENTER — enters the frequency when programming channels.

PROGRAMMING YOUR SCANNER

A good reference for active frequencies is Radio Shack's *Police Call Directory including Fire and Emergency Services.* We update this directory every year, so be sure to get a current copy. Also, refer to "Reception Notes" and "Searching for Active Frequencies".

1. Turn on your scanner by turning VOLUME clockwise. The scanner might start scanning: if so, press [MANUAL] to stop scanning.	
2. Enter the channel number you want to program and press [MANUAL].	
3. Enter a frequency including the decimal point. The decimal point is displayed as a dash (—) on the display.	
4. Press [ENTER] to store the frequency. If you made a mistake in Step 3, E appears on the display. Proceed again from Step 3.	
5. To confirm the proper entry, press [REVIEW]. The programmed frequency appears on the display, one digit at a time.	
6. To program more channels, repeat Steps 2-4. If you want to program the next channel in sequence, simply press [MANUAL] and repeat Steps 3-4.	

Note: Sometimes when you try to enter a frequency for a channel, E appears on the display when you press [ENTER]. This means the frequency is in error and you can not enter it into your PRO-2025.

Such frequency errors usually mean you entered a frequency outside the ranges your PRO-2025 operates on (such as 225.00 MHz) or you put the decimal point in the wrong place (14.682 MHz instead of 146.82 MHz). Check carefully to find your mistake and enter the correct number.

SETTING THE VOLUME AND SQUELCH CONTROLS

Use the SQUELCH control to decrease your scanner's sensitivity to weak signals. This lets the scanner receive only the strongest transmissions.

1. Turn the SQUELCH and VOLUME controls fully counterclockwise.
2. Turn the VOLUME control clockwise until you hear a hissing sound.
3. Slowly turn the SQUELCH control clockwise until the hissing stops.

SCANNING THE CHANNELS

To begin scanning the channels, press [SCAN]. Your scanner scans through all the channels except the ones you have locked out. Be sure to read the following sections to get the full benefit from your scanner's special features.

LOCKING OUT CHANNELS

You can make your scanner scan more efficiently by locking out channels that you have not programmed. Enter the channel number you wish to lock out, press [MANUAL] and then press [LOCK OUT] so that the LOCK OUT indicator lights. This is also handy for locking out channels that have a continuous transmission. You can still manually select locked-out channels for listening.

To unlock a channel you have locked, manually select the channel and press [LOCK OUT] so that the LOCK OUT indicator goes off.

USING THE PRIORITY FEATURE

Channel 1 is designated as your scanner's priority channel. You can turn on the priority feature so that you do not miss transmissions on Channel 1, even if you monitor another channel.

Press [PRIORITY]. Now your scanner checks Channel 1 every 2 seconds (P appears on the display momentarily), and stays on the channel if there is any activity. Press [PRIORITY] again to disable the priority function.

MANUALLY SELECTING A CHANNEL

You can continuously monitor a single channel without scanning. This is useful if you hear an emergency broadcast on a channel and do not want to miss any of the details — even though there might be periods of silence — or if you want to monitor a channel that you have locked out.

To select a channel to monitor, press [MANUAL] and advance through the channels by pressing [MANUAL] repeatedly, or move directly to a channel by entering the channel number on the keypad then pressing [MANUAL]. If your scanner is scanning and has stopped at the desired channel, press [MANUAL] one time.

LISTENING TO THE WEATHER BAND

The FCC (Federal Communications Commission) has allocated several channels for use by the National Oceanic and Atmospheric Administration (NOAA). We preprogrammed your scanner with all of the frequencies available to NOAA. To hear your local forecast and regional weather information, press [WX]. Your scanner begins scanning through the weather band, and the WX indicator lights.

Your scanner should stop within a few seconds, and you hear the local weather broadcast. If the broadcast is weak, you can press [WX] again to scan through the rest of the weather band.

To exit the WX mode, press either [SCAN] or [MANUAL].

A GENERAL GUIDE TO SCANNING

BIRDIES

Birdies are the products of internally generated signals that make some frequencies difficult or impossible to receive. If you program one of these frequencies, you hear only noise on that frequency.

If the interference is not severe, you might be able to cut out the birdie by turning the SQUELCH control clockwise. The most common birdies to watch for are listed below.

31.200 MHz

41.600 MHz

RECEPTION NOTES

Reception of the frequencies covered by your scanner is mainly "line of sight." That means that you usually cannot hear stations at your listening location that extend beyond the horizon.

During the summer months, you might be able to hear stations in the 30-50 MHz range located several hundred or even thousands of miles away. This is caused by summer atmospheric conditions. This type of reception is unpredictable but often very interesting.

GUIDE TO THE ACTION BANDS

With a little investigation, you can find the active frequencies in your community to monitor exciting events. We can give you some general pointers on finding these frequencies and you can take it from there. Please use caution and common sense when you hear an emergency call. Never go to the scene of an emergency. It could be very dangerous.

Find out if there is a local club that monitors your community's frequencies. Perhaps a local electronics repair shop that works on equipment similar to your scanner can give you channel frequencies used by local radio services. A volunteer police department or fire department employee can also be a good source for this information.

As a general rule on VHF, most activity concentrates between 153.785 and 155.98 MHz and then again from 153.73 to 159.46 MHz. Here you find local government, police, fire, and most other emergency services. If you are near a railroad or major railroad tracks, look between 160.0 to 161.9 for signals.

In some larger cities, there has been a move to the UHF bands for emergency services. Here, most of the activity is between 453.025 and 453.95 MHz and again between 456.025 and 459.95 MHz.

In the UHF band, mobile and control units associated with base and repeater units operate between the frequencies of 456.025 and 459.95 MHz and again between 465.025 and 469.975 MHz. The repeaters operate 5 MHz lower than the base and mobile units (that is, 451.025 to 454.95 MHz and 460.025 to 464.975 MHz). This means that if you find an active frequency inside one of these spreads, you can look 5 MHz lower (or higher, as the case may be) to find that radio service.

Frequencies in different bands are accessible only at specific intervals. However, the frequencies that you can store into your scanner's memory are in 5 or 12.5 kHz steps. Your scanner automatically rounds the entered frequency down to the nearest valid frequency. For example, if you try to enter a frequency of 151.473, your scanner accepts it as 151.475.

TYPICAL BAND USAGE

The following is a brief listing of the services typical of the bands received by your scanner. This listing can help you decide which ranges you would like to scan.

Abbreviations:

Affiliate Radio System . . . . . MARS
Amateur . . . . . .Ham
Automobile Emergency. . . . . Auto Emer.
Broadcast Remote . . . . . BC. R.
Bureau of Reclamation . . . . . Bur. Recl.
Civil Air Patrol . . . . . .CAP
Department of Agriculture
and Forestry . . . . . .Agr. and For.
Fire Department . . . . . .F.D.
Forest Products. . . . . .For. Prod.
Forestry Conservation . . . . . .Fors. Cons.
Government . . . . . Govt.
Highway Maintenance . . . . . Hwy.
Land Transportation. . . . . Land Tr.
Local Government . . . . . L. Govt.
Manufacturers. . . . . .Mfg.
Military. . . . . MIL
Mobile Telephone . . . . . Mob. Tel.
Motion Picture. . . . . .Mot. P.
Motor Carrier. . . . . .Buses. Trucks
National Parks. . . . . Nat. Park
Petroleum. . . . . Pet
Police. . . . . .P.D.
Power Utilities . . . . . Power
Radio Paging . . . . . Page
Railroad . . . . . .R.R.
Relay Press . . . . . .Press
State Police . . . . . St. P.D.
Special Emergency . . . . . Sp. Ind.
Taxicab Radio. . . . . .Taxi
Telephone Maintenance . . . . . .Tel. Maint.
U.S. Coastal
and Geodetic Survey . . . . . U.S.C.G.S.
U.S. Navy. . . . . .USN
U.S. Weather Bureau . . . . . U.S.W.B.

29 - 54 MHz BAND

29.00 - 29.70 . . . . . 10HAM
29.70 - 29.80 . . . . . For. Prod.
29.80 - 30.00 . . . . . .Aero.
30.01 - 30.56 . . . . . .Govt.
30.56 - 30.62 . . . . . Sp. Ind.
30.66 - 31.24 . . . . . Ind. (Pet., For. Cons., Bus., For. Prod.)
31.26 - 31.98 . . . . . Sp. Ind., For. Cons.
32.00 - 33.00 . . . . . Govt.
33.02 - 33.16 . . . . . Hwy., Sp. Emer., Bus.
33.18 - 33.38 . . . . . .Pet.
33.42 - 33.98 . . . . . F.D.
34.00 - 35.00 . . . . . .Govt.
35.02 - 35.18 . . . . . Bus.
35.22 - 35.66 . . . . . Mob. Tel. & Page
35.70 - 35.72 . . . . . Bus.
35.74 - 35.98 . . . . . Sp. Ind. & Bus
36.00 - 37.00 . . . . . .Govt.
37.02 - 37.44 . . . . . P.D. & L. Govt.
37.46 - 37.86 . . . . . Power
37.90 - 37.98 . . . . . Hwy. & Sp. Emer.
38.00 - 39.00 . . . . . .Govt.
39.02 - 39.98 . . . . . P.D., L. Govt.
40.00 - 42.00 . . . . . .Govt.
42.02 - 42.94 . . . . . St. P.D.
42.96 - 43.18 . . . . . Sp. Ind. & Bus.
43.22 - 43.68 . . . . . .Mob. Tel. Page
43.70 - 44.60 . . . . . .Trucks. Bus.
44.62 - 45.06 . . . . . St. P.D., For. Cons.
45.08 - 45.66 . . . . . P.D.
45.68 - 46.04 . . . . . .P.D. Hwy., Sp. Emer.
46.06 - 46.50 . . . . . F.D.
46.52 - 46.58 . . . . . .L. Govt.
46.60 - 47.00 . . . . . .Govt.
47.02 - 47.40 . . . . . .St. Hwy.
47.42 . . . . . Red Cross
47.44 - 47.68 . . . . . .Sp. Ind. Sp. Emer.
47.70 - 48.54 . . . . . Power
48.56 - 49.58 . . . . . .For. Prod., Pet.
49.60 - 50.00 . . . . . .Govt.
50.00 - 54.00 6 Meter Amateur (Ham) Band

136 - 174 MHz BAND

136.000 - 144.000 . . . . . Govt.
144.000 - 148.000 . . . . . HAM
148.010 . . . . . MARS
148.150 . . . . . .CAP
148.155 - 148.250 . . . . . MIL
148.290 - 150.750 . . . . . .USN
150.815 - 150.995 . . . . . .Bus.
151.010 - 151.130 . . . . . HWY
151.145 - 151.475 . . . . . .For. Cons.
151.505 - 151.595 . . . . . Sp. Ind.
151.625 - 151.955 . . . . . .Bus.
151.985 - 152.240 . . . . . Mob. Tel. (RCC)
152.270 - 152.450 . . . . . .Taxi
152.480 - 152.840 . . . . . Mob. Tel. Page
152.870 - 153.020 . . . . . Sp. Ind. Mot. P.
153.050 - 153.440 . . . . . Pet., For. Prod.
153.470 - 153.710 . . . . . Power
153.740 - 154.115 . . . . . L. Govt.
154.130 - 154.445 . . . . . .F.D.
154.450 - 154.600 . . . . Sp. Ind., Pet., Bus.
154.655 - 155.145 . P.D., L. Govt., St. P.D.
155.160 - 155.400 . . . . . Sp. Emer., P.D.
155.415 - 156.030 . . . . . .P.D., L. Govt.
156.045 - 156.240 . . . . . .Hwy., P.D.
156.275 - 157.425 . . . . . Marine
157.456 - 157.500 . . . . . Auto Emer.
157.530 - 157.710 . . . . . .Taxi
157.740 - 158.100 . . . . . .Mob. Tel., Page
158.130 - 158.460. Power, For. Prod., Pet.
158.490 - 158.700 . . . . . Mob. Tel. (RCC)
158.730 - 158.970 . . . . . .P.D., L. Govt.
158.985 - 159.210 . . . . . P.D. Hwy.
159.225 - 159.465 . . . . . .For. Cons.
159.510 - 160.200 . . . . . Trucks
160.215 - 161.565 . . . . . .R.R.
161.600 - 162.000 . . . . . Marine
162.026 - 162.175 . . . . . Bur. Recl.
162.400 . . . . . U.S.W.B.
162.550 . . . . . U.S.W.B.
163.125 . . . . . .Indian Affairs
163.175 . . . . . Bur. Recl.
163.275 . . . . . U.S.W.B.
163.388 - 163.538 . . . . . MIL
163.825 - 163.975 . . . . . Govt.
164.025 - 164.075. . . . . .U.S.C.G.S.
164.175 - 165.188. . . . Bur. Recl. Nat. Pk. Govt., Agr. & For.
169.300. . . . . F.A.A.
169.450 - 169.725. . . . . .Ind., Data
170.150. . . . . F.D., BC. R.
170.200 - 170.220. . . . . .U.S.C.G.S.
170.225 - 170.325. . . . . Ind., Land Tr.
170.425 - 170.575. . . . . For. Cons.
170.975 - 171.250. . . . Govt. Ind., Land Tr.
171.388 - 172.725. . Bur. Recl., For. Cons., Ind., Dept. Ag. & For., Govt.
172.775. . . . . .Nat. Pk.
173.025. . . . . U.S.W.B.
173.075. . . . . .U.S.C.G.S.
173.204. . . . . Mot. P., Pet., Bur. Recl. Press Relay.

406 - 512 MHz BAND

406.000 - 420.000. . . . . .Govt.
420.000 - 450.000. . . . . HAM
450.050 - 450.950. . . . . Remote Br.
451.000 - 451.150. . . . . .Util.
451.175 - 451.750. . . . . For. Prod., Pet., Power., Tel. Maint.
451.775 - 451.975. . . . . Spec. Ind.
452.000 - 452.500. Taxi, Mot. Carrier, R.R.
452.525 - 452.600. . . . . Auto Club
452.625 - 452.975. . . . . Motor Carr., R.R.
453.000 - 453.975. . . . L. Govt., P.D., F.D.
454.000 - 454.975. . . . . .Mob. Tel.
455.000 - 455.975. . . . . Remote Br.
456.000 - 458.975. P.D., F.D., Ind., Lan. Tr.
459.000 - 459.975. . . . . .Domestic Public
460.000 - 460.625. . . . . .P.D., F.D.
460.650 - 462.175. . . . . Bus.
462.200 - 462.450. . . . . Taxi
462.750 - 462.975. . . . . Bus.
463.000 - 463.175. . . . . Medical
463.200 - 464.975. . . . . Bus.
465.000 - 467.500 P.D., F.D., Ind., Land Tr.
467.750 - 467.925. . . . . Bus.
467.7375 - 469.975. . . . Pub. Safety. Ind., Land Tr.

TV Bands for Special Communications

470 - 476 T.V. Channel 14
476 - 482 T.V. Channel 15
482 - 488 T.V. Channel 16
488 - 494 T.V. Channel 17
494 - 500 T.V. Channel 18
500 - 506 T.V. Channel 19
506 - 512 T.V. Channel 20

6 MHz Segment is allocated for Channel 14

470.0125 - 470.2875 . . . Domestic Public, (Base, Mob.)
470.3125 - 471.1375 . . . . . .Public Safety
471.1625 - 471.2875 . . . . Reserve Pool A
471.3125 - 471.4125 . . . .Pwr., Tel. Maint.
471.4375 - 471.6375 . . . . . .Spec. Ind.
471.6625 - 471.7875 . . . . Reserve Pool B
471.8125 - 472.3375 . . . . . .Bus.
472.3625 - 472.4375 . . . . . .Taxi
472.4675 - 472.7875 . R.R., Motor Carrier, Auto Emer.
472.8125 - 472.9875 Pet., For. Prod., Mfg.
473.0125 - 473.2875 . . . .Domestic Public
473.3125 - 474.1375 . . . . . .Public Safety
474.1625 - 474.2875 . . . . Reserve Pool A
474.3125 - 474.4125 . . . .Pwr., Tel. Maint.
474.4375 - 474.6375 . .Spec. Ind. (Mobile)
474.6625 - 474.7875 . . . . Reserve Pool B
474.8125 - 475.3375 . . . . . .Bus.
475.3625 - 475.4375 . . . . . .Taxi
475.4625 - 475.7875 . R.R., Motor Carrier, Auto Emer.
475.8125 - 475.9876 .Pet., For. Prod. Mfg.

These frequencies are subject to change and might vary some from area to area. For a more complete listing, refer to the Police Call Radio Guide Including Fire and Emergency Services available at your local Radio Shack store.

You might discover one of your regular stations on a frequency that is not listed. This could be what is known as an "image." For example, if you suddenly find 453.2750 you also hear on 474.9750, do a little math to see if it is an image. Take the intermediate frequency of 10.85 MHz and double it. Then, subtract it from the "new" frequency. If the answer is the regular frequency, you have tuned to an image. Occasionally you might get interference on a weak or distant channel from a strong broadcast 21.7 MHz (10.85 MHz x 2) below the tuned frequency. This is rare, and image signal usually clears whenever a broadcast on the actual frequency is in progress.

TROUBLESHOOTING

IF YOU HAVE PROBLEMS...

Here are some suggestions which might help.

PROBLEM	POSSIBLE CAUSE	REMEDY
Scanner is totally inoperative.	No power.	Check the power connection. Also check the in-line fuse. If it is blown, replace with identical one.
Scanner is on but will not scan.	The SQUELCH control is not correctly adjusted.	Adjust the SQUELCH control clockwise.
In the scan mode the scanner locks on frequencies that have an unclear transmission.	"Birdies"	Avoid programming frequencies listed on Page 13, or only listen to them manually.

If none of these suggested remedies solves the problem, return your scanner to your local Radio Shack store for assistance.

CARE AND MAINTENANCE

Your Realistic PRO-2025 programmable scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the PRO-2025 so that you can enjoy it for years.

Keep the scanner dry. If it does get wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.

Handle the scanner gently and carefully. Dropping it can damage circuit boards and cases and can cause the product to work improperly.

Use and store the scanner only in normal temperature environments. Extreme temperatures can shorten the life of electronic devices and distort or melt plastic parts.

Keep the scanner away from dust and dirt, which can cause premature wear of parts.

Wipe the scanner with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the scanner.

Modifying or tampering with the scanner's internal components can cause a malfunction and might invalidate the scanner's warranty. If your scanner is not operating as it should, take it to your local Radio Shack store for assistance.

SPECIFICATIONS

Frequency Coverage:

VHF-Lo	29 - 50 MHz (in 5 kHz steps)
Ham	50 - 54 MHz (in 5 kHz steps)
Government	136 - 144 MHz (in 5 kHz steps)
Ham	144 - 148 MHz (in 5 kHz steps)
VHF-Hi	148 - 174 MHz (in 5 kHz steps)
Ham/Government	406 - 450 MHz (in 12.5 kHz steps)
UHF-Lo	450 - 470 MHz (in 12.5 kHz steps)
UHF-Hi (TV)	470 - 512 MHz (in 12.5 kHz steps)

Channels of Operation ..... Any 16 channels in any band combinations

Sensitivity (20 dB signal-to-noise ratio at ±3 kHz deviation)

29 - 54 MHz	0.5μV
136 - 174 MHz	0.8μV
406 - 512 MHz	1.0μV

Spurious Rejection (except image frequency):

29 - 54 MHz	40 dB at 40 MHz
136 - 174 MHz	55 dB at 155 MHz
406 - 512 MHz	55 dB at 460 MHz

Selectivity:

±11 kHz	—6 dB
±15 kHz	—50 dB

IF Rejection:

10.85 MHz	70dB at 155 MHz

Scanning Rate ..... 12 channel/sec.

Delay Time ..... 2 seconds

Modulation Acceptance ..... ±12 kHz

Intermediate Frequencies ..... 10.85 MHz and 450 kHz

Filters ..... 1 crystal filter,
1 ceramic filter

Squelch Sensitivity	Threshold: Less than 1.0μV Tight: (S + N)/N 25 dB
Antenna Impedance	50 ohms
Audio Power	2.2 watts maximum, 4 ohms
Built-in Speaker	3" (77mm) 4 ohm, dynamic type
Power Requirements	13.8 VDC ($\pm$10%)
Current Drain	DC 180 mA (squelched) DC 520 mA (full volume unsquelched)
Dimensions	$1\frac{3}{4}$" (45mm) x $5\frac{1}{2}$" (140mm) x $6\frac{7}{8}$" (175mm) HWD
Weight	1.8 lbs (800 g)

NOTES

NOTES

RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

RADIO SHACK
A Division of Tandy Corporation
Fort Worth, Texas 76102

UBRS01214ZZ
4A0 Printed in the Philippines

uniden®

Bearcat®

BC 100XLT

100 CHANNEL PROGRAMMABLE HAND HELD SCANNER

- 100 CHANNELS
- 11 BAND COVERAGE
- CRYSTAL FREE
- AUTOMATIC SEARCH
- PRIORITY CHANNEL
- SELECTIVE SCAN DELAY
- DISPLAY LIGHT
- AUTOMATIC LOCKOUT
- TRACK TUNING
- DIRECT CHANNEL ACCESS

OPERATING GUIDE

RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

RADIO SHACK
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4A0
Printed in the Philippines

Introduction

Welcome to the exciting world of handheld radio scanners. State-of-the-Art engineering and microelectronics provide programmable operation and dependability while minimizing size and power consumption. The keyboard allows you to program any VHF or UHF frequency on all 100 channels, and to control Scan, Lockout, Priority, Delay, Hold, Weather Search and Channel Bank selection as well as the programmable search functions. There is also a keyboard lock function to prevent accidental reprogramming of the unit. An LCD display provides frequency and operation information. There is a built-in light for night time use. The detachable NiCad battery pack provides hours of monitoring and recharges overnight. The case is designed to withstand the tough requirements of the handheld environment, and is built of high impact ABS plastic. There is also a leather case (included) to further protect this scanner. Please read this guide through before attempting to operate the unit.

Warning

Uniden does **not** represent this unit to be **waterproofed**. To reduce the risk of fire, electrical shock or damage,do not expose this unit to rain or moisture.

Note:
The installation, possession or use of this scanning radio in a motor vehicle may be prohibited, regulated, or require a permit in certain states, cities, and/or local jurisdiction. Your local law enforcement officials should be able to provide you with information regarding the laws in your community.

Unpacking

Carefully remove all items from the shipping carton. If there is any visible damage or an item appears to be missing, **do not return the unit to the place of purchase**. Please call the Uniden Customer Service Center for information or instructions on any problem you may have:
(317) 842-2483 8am-5pm EST, Monday-Friday.
The following items are included with your BC 100XLT:

* Bearcat Scanner
* AC Adaptor/Charger
* Flexible Antenna
* Carrying Case
* Earphone
* Rechargeable Battery Pack
* Operating Guide including Registration Card (cut out, fill in, and return)

Please keep the shipping carton, and packing materials. This carton serves as an excellent method to transport the scanner.

Trouble Shooting

If your BC 100XLT is not performing up to your expectations, try the steps listed below. If you cannot get satisfactory results please call the Uniden Customer Service Center for assistance:

(317) 842-2483 8am - 5pm EST, Monday-Friday.

1.Scanner is not working properly.

A. Check the power connections.
B. Check the volume and squelch.
C. Make sure programming is correct.

2. Signal is weak or distorted.

A. Check antenna connection.
B. Check proper frequencies.
C. Make sure frequency is active.

3. Improper reception.

A. Check proper frequencies.
B. Reposition radio.
C. Check antenna connection.

4. Scan won't stop.

A. Check squelch adjustment.
B. Check proper frequencies.
C. Check antenna connection.
D. Check lockout.

5. Incomplete reception.

A. Fringe area of reception.
B. Check squelch adjustment.

6. Keypad won't work.

A. Check keypad lock switch.

7. Priority won't work.

A. Check squelch adjustment.
B. Improper frequency in Channel 1.

Optional Accessories

The following accessories are available for your BC 100XLT at your local Uniden Dealer or from the Uniden Customer Service Center:
(317)842-2483 8am-5pm EST, Monday-Friday.

PS-001 Vehicle Power Cord - This power cord is designed for use with the BC 100XLT in a vehicle. This heavy duty cord comes complete with a cigarette lighter connector and fuse.
AD-140U Replacement AC Adaptor
AT-094 Flexible Antenna Replacement antenna for the BC 100XLT
BP-205 Extra Battery Pack - For heavy use get an extra battery pack for your BC 100XLT. Then, one can be charging while the other is in use.
Betty Bearcat Frequency Directory- You can get much more out of your scanner with one of the Betty Bearcat Frequency Directories. Tens of thousands of verified frequencies for police, fire, emergency, aircraft, railroad, and many other services. When you turn to your local area you will find new active frequencies full of exciting action. There is a directory for the eastern states and western states, and a local frequency listing.
FBE - Eastern USA including all areas in the eastern time zone.
FBW - Western USA including central time zone, and west.
LFL - Local listing of active frequencies in your area only.
Note: The use of a scanner in a vehicle may be regulated or prohibited in some states. Check with your local authorities before operating a mobile scanner.

Specifications

Band Coverage: 11 Bands
Frequency Range:

10 Meter "Ham"	29.0-29.7 MHz
Low Band	29.7-50.0 MHz
6 Meter "Ham"	50.0-54.0 MHz
Aircraft	118-136 MHz
Military Land Mobile	136-144 MHz
2 Meter "Ham"	144-148 MHz
High Band	148-174 MHz
Federal Government	406-420 MHz
70cm "Ham"	420-450 MHz
UHF Band	450-470 MHz
"T" Band	470-512 MHz

Channels: 100 Channels (10-10 channel banks)
Scan Speed: 15 channels per second (scanning)
25 frequencies per second (search mode)
Display: Illuminated Liquid Crystal
Power Requirement:
12V DC (internal battery, AC Adaptor or vehicle adaptor)
Sensitivity: 29-54 & 136-174 MHz = 0.4 microvolts (nominal)
118-136 MHz = 0.8 microvolts (60%AM) (12dB SINAD)
406-512 MHz = 0.5 microvolts
Selectivity: −55dB @ ± 25 KHz
Audio Output:
480 milliwatts maximum
Antenna: flexible antenna included
Connectors: antenna, earphone, DC power
Size: 2 3/4"W x 7 1/2"H x 1 1/4"D
Weight: 1 lb., 4 oz.

Certified in accordance with FCC rules and regulations part 15 as of date of manufacture.

Specifications are typical and subject to change without notice.

Birdies

All radios are subject to receiving undesired signals. If the BC 100XLT stops during scan mode and no sound is heard, it may be receiving a "Birdie". Birdies are internally generated signals inherent in the electronics all the receivers. Press the Scan key to continue scanning.

Frequency Allocations

Because of the short-range nature of VHF and UHF FM communications, frequencies allocated to services in one geographical location will not be heard more than 25-50 miles distance (an exception is "skip" when signals bounce back to earth from the ionosphere). For this reason a separate frequency directory must be compiled for each local monitoring area.

Most standard frequency separations and classifications are regulated in the United States by the FCC. Block allocations and even some discrete frequencies covered by your scanner are shown below. These frequencies are not necessarily active in your area. Uniden provides an eastern or western regional directory and a local listing of active frequencies. See the Optional Accessories section for more information.

Abbreviations

The following is a list of abbreviations used to identify the organizations in the frequency allocations.

Amateur	Ham
Automobile Emergency	Auto Emer.
Aviation	Aero
Broadcast Remote	BC. R
Bureau of Reclamation	Bur. Recl.
Business Radio	Bus.
Department of Agriculture and Forestry	Agr. & For.
Fire Department	F.D.
Forest Products	For. Prod.
Forestry Conservation	Fors. Cons.
Government	Govt.
Highway Maintenance	Hwy.
Indian Affairs	
Land Transportation	Land Tr.
Local Government	L. Govt.
Manufacturers	Mfg.
Military	MIL
Mobile Telephone	Mob. Tel.
Motion Picture	Mot. P.
National Parks	Nat. Pk.
Petroleum	Pet.
Police	P.D.
Power Utilities	Power
Radio Paging	Page
Railroad	R.R.
Red Cross	
State Police	St. P.D.
Special Emergency	Sp. Emer.
Special Industrial	Sp Ind.
Taxicab Radio	Taxi
U.S. Coastal and Geodetic Survey	U.S.C.G.S.
U.S. Weather Bureau	U.S.W.B.

29 - 54 MHz BAND

29.00 - 29.70	10 Ham
29.70 - 29.80	For. Prod.
29.80 - 30.00	Aero
30.01 - 30.56	Govt.
30.56 - 30.62	Sp. Ind.
30.66 - 31.24	Ind. (Pet., Fors. Cons. Bus., For. Prod.)
31.26 - 31.98	Sp. Ind., Fors. Cons.
32.00 - 33.00	Govt.
33.02 - 33.16	Hwy.,' Sp. Emer., Bus.
33.18 - 33.38	Pet.
33.42 - 33.98	F.D.
34.00 - 35.00	Govt.
35.02 - 35.18	Bus.
35.22 - 35.66	Mob. Tel. & Page
35.70 - 35.73	Bus.
35.74 - 35.98	Sp. Ind. & Bus
36.00 - 37.00	Govt.
37.02 - 37.44	F.D. P.D. & L. Govt.
37.45 - 37.86	Power
37.90 - 37.98	Hwy. & Sp. Emer.
38.00 - 39.00	Govt.
39.02 - 39.98	P.D., L. Govt.
40.00 - 42.00	Govt.
42.02 - 42.94	St. P.D.
42.96 - 43.18	Sp. Ind. & Bus.
43.22 - 43.68	Mob. Tel. Page
43.70 - 44.60	Trucks., Bus.
44.62 - 45.06	St. P.D., Fors. Cons.
45.08 - 45.66	P.D.
45.68 - 46.04	P.D. Hwy., Sp. Emer.
46.06 - 46.50	F.D.
46.52 - 46.58	P.D., L. Govt.
46.60 - 47.00	Govt.
47.02 - 47.40	St. Hwy.
47.42	Red Cross
47.44 - 47.68	Sp. Ind. Sp. Emer.
47.70 - 48.54	Power
48.56 - 49.58	L. Govt., Pet.
49.60 - 50.00	Govt.
50.00 - 54.00	Ham

118 - 174 MHz BAND

118.000 - 135.975	Aero
136.00 - 144.00	Govt.
146.000 - 148.000	Ham
148.010	MARS
148.150	CAP
148.155 - 148.250	MIL
148.290 - 150.750	USN
150.815 - 150.995	Bus.
151.010 - 151.130	Hwy
151.145 - 151.475	Fors. Cons.
151.505 - 151.595	Sp. Ind.
151.625 - 151.955	Bus.
151.985 - 152.240	Mob. Tel. (RCC)
152.270 - 152.450	Taxi
152.480 - 152.840	Mob. Tel. & Page
152.870 - 153.020	Sp. Ind. Mot. P.
153.050 - 153.440	Pet., For. Prod.
153.470 - 153.710	Power
153.740 - 154.115	F.D. L. Govt.
154.130 - 154.445	F.D.
154.450 - 154.600	Sp. Ind., Pet., Bus.
154.655 - 155.145	P.D., L. Govt., ST. P.D.
155.160 - 155.400	Sp. Emer., P.D.
156.045 - 156.240	L. Govt., Hwy., P.D.
156.275 - 157.425	Marine
157.456 - 157.500	Auto Emer.
157.530 - 157.710	Taxi
157.740 - 158.100	Mob. Tel. & Page
158.130 - 158.460	Power, For. Prod., Pet.
158.490 - 158.700	Mob. Tel. (RCC)
158.730 - 158.970	P.D., L. Govt.
158.985 - 159.210	P.D. Hwy.
159.225 - 159.465	Fors. Cons.
159.510 - 160.200	Trucks
160.215 - 161.565	R.R.
161.600 - 162.000	Marine
162.026 - 162.175	Bur. Recl.
162.400	U.S.W.B.
162.475	U.S.W.B.
162.550	U.S.W.B.
163.125	Indian Affairs
163.175	Bur. Recl.
163.275	U.S.W.B.
163.388 - 163.538	MIL
163.825 - 163.975	Govt.
164.025 - 164.075	U.S.C.G.S.
164.175 - 165.188	Bur. Recl., Nat. Pk. Govt., Agr. & For.
169.300	F.A.A.
169.450 - 169.725	Nat. Pk., Ind., Data
170.150	P.D., BC. R.
170.200 - 170.220	U.S.C.G.S.
170.225 - 170.325	Ind., Land Tr.
170.425 - 170.575	Fors. Cons.
170.975 - 171.250	Govt., Sp. Ind. & Land Tr.
171.388 - 172.725	Bur. Recl., Fors. Cons., Ind. Dept. Ag. & For., Govt.
172.775	Nat. Pk.
173.025	U.S.W.B.
173.075	U.S.C.G.S.
173.204 - 173.375	Press Relay, Mot. P., Pet., Bus. Recl.

406 - 512 MHz BAND

406.000 - 420.000	Govt.
420.000 - 450.000	Ham
450.050 - 450.950	Remote Br.
451.200 - 451.150	Util.
451.175 - 451.750	For. Prod., Pet., Power., Tel. Maint.
451.775 - 451.975	Spec. Ind.
452.000 - 452.500	Taxi, Mot. Carrier & R.R.
452.525 - 452.600	Auto Club
452.625 - 452.975	BC. R., Motor Carrier & R.R.
453.000 - 453.975	L. Govt., P.D. & F.D.
454.000 - 454.975	Mob. Tel. & Page
455.000 - 455.975	Remote Br.
456.000 - 458.975	P.D., F.D., Ind., Land. Tr.
459.000 - 459.975	Mob. Tel., Page, & Domestic Public
460.000 - 460.625	P.D., F.D.
460.650 - 462.175	Bus.
462.200 - 462.450	Taxi.
462.550 - 462.725	C.B.
462.750 - 462.975	Bus.
463.000 - 463.175	Medical
463.200 - 464.975	Bus.
465.000 - 467.500	P.D., F.D., Sp. Ind. & Land.Tr.
467.5375 - 467.7375	C.B.
467.7375 - 469.925	Pub. Safety, Ind., & Land Tr.

In some large metropolitan areas, 1 or 2 channels of the "TV Band" (470 MHz to 512 MHz) are used for communication purposes. Each TV station (channels 14 through 20) utilizes 6 MHz:

470 - 476	T.V. Channel 14
476 - 482	T.V. Channel 15
482 - 488	T.V. Channel 16
488 - 494	T.V. Channel 17
494 - 500	T.V. Channel 18
500 - 506	T.V. Channel 19
506 - 512	T.V. Channel 20

Where these frequencies are assigned for communication purposes, in lieu of a TV station, the 6 MHz segment is allocated as shown here for channel 14 (470 - 476 MHz).

470.0125 - 470.2875	Domestic Public, (Base, Mob.)
470.3125 - 471.1375	Public Safety
471.1625 - 471.2875	Reserve Pool A
471.3125 - 471.4125	Pwr., Tel. Maint.
471.4375 - 471.6375	P.D., Spec. Ind.
471.6625 - 471.7875	Reserve Pool B
471.8125 - 472.3375	Bus.
472.3625 - 472.4375	Taxi
472.4675 - 472.7875	R.R., Motor Carrier, Auto Emer.
472.8125 - 472.9875	Pet., For. Prod., Mfg.
473.0125 - 473.2875	Domestic Public
473.3125 - 474.1375	Public Safety
474.1625 - 474.2875	Reserve Pool A
474.3125 - 474.4125	Power., Tel. Maint.
474.4375 - 474.6375	Spec. Ind. (Mobile)
474.6625 - 474.78765	Reserve Pool B
474.8125 - 475.3375	Bus.
475.3625 - 475.4375	Taxi
475.4625 - 475.4875	R.R., Motor Carrier, Auto Emer.
475.8125 - 475.9875	Pet., For. Prod., Mfg.

The same allocation pattern is repeated for each of the TV channels 14 through 20. For example, if channel 17 is assigned for communications in your area, "Taxi" would be 490.3625 to 490.4375 and 493.3625 to 493.4375 (corresponding to 472.3625 to 472.4375 and 475.3625 to 475.4375 above). Note that in the example, we added three TV channels (18 MHz to the channel 14 frequencies).

Warranty

WARRANTOR: UNIDEN America Corporation (UNIDEN®)

ELEMENTS OF WARRANTY: UNIDEN® warrants, for the duration of this warranty, UNIDEN® Bearcat Scanners (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitation or exclusions set out below.

WARRANTY DURATION: This warranty shall terminate and be of no further effect one (1) year after the date of the original purchase of the Product or at the time the Product is (A) damaged or not maintained as reasonable and necessary, (B) modified, (C) improperly installed, (D) repaired by someone other than warrantor for a defect or malfunction covered by this warranty, (E) used in a manner or purpose for which the Product was not intended, or (F) sold by the original purchaser.

STATEMENT OF REMEDY. In the event that the Product does not conform to this warranty at any time while this warranty is effective, warrantor shall repair the defect and return it to you without charge for parts, service, or any other cost incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: In the event that the Product does not conform to this warranty during the warranty period, the Product should be shipped or delivered, freight prepaid, to warrantor at UNIDEN SERVICE CENTER 9340 Castlegate Dr., Indianapolis, IN 46256 with evidence of original purchase.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is void outside the United States of America.

PAT. UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENT NUMBERS:

3,873,924	3,883,808	3,961,261	3,962,644	3,974,452
3,987,400	3,996,521	3,996,522	4,000,468	4,027,251
4,057,760	4,092,594	4,100,497	4,114,103	4,123,715
4,157,505	4,179,662	4,219,821	4,270,217	4,398,304
4,409,688	4,455,679	4,461,036	4,521,915	4,627,100
RE 31,523				

OTHER U.S. AND FOREIGN PATENTS PENDING

UBUD01109AE (SK)
Printed in The Philippines

uniden® Bearcat®

BC 100XLT

100 CHANNEL PROGRAMMABLE HAND HELD SCANNER

- 100 CHANNELS
- 11 BAND COVERAGE
- CRYSTAL FREE
- AUTOMATIC SEARCH
- PRIORITY CHANNEL
- SELECTIVE SCAN DELAY
- DISPLAY LIGHT
- AUTOMATIC LOCKOUT
- TRACK TUNING
- DIRECT CHANNEL ACCESS

OPERATING GUIDE

uniden Bearcat BC 100XLT Product Registration Card

Thank you for choosing a Uniden® Personal Communications product. You have chosen one of the most sophisticated, technologically advanced electronic products available. Please fill out the requested information on this card so that we can better understand our customers and their needs. With this information we can plan new products, advertising, and guide our customer service programs. Thanks for your help.

1. ☐ Mr. 2. ☐ Mrs. 3. ☐ Ms. 4. ☐ Miss

5. First Name 6. Initial 7. Last Name

8. Street 9. Apt. No.

10. City 11. State 12. Zip

13. Date of Purchase: Mo Day Yr

14. Serial No.

15. Is this the first scanner you have purchased or received as a gift?
YES ☐ NO ☐

16. If NO, please specify brand and model number purchased.
A. _____
B. _____
C. _____

17. Where did your purchase the product?
☐ Department Store
☐ Discount Store
☐ Catalog Showroom
☐ Electronics Specialty Store
☐ Local Electronics Dealer
☐ Mail Order
☐ Gift
☐ Truck Stop
☐ Other

18. How did you become aware of this product?
☐ TV Advertisement
☐ Magazine Advertisment
☐ Newspaper Advertisement
☐ Store Display
☐ Friend's Recommendation
☐ Salesperson's Recommendation
☐ Previous Use

19. Please check two of the factors that most influenced your purchase of this product.
☐ Style or Appearance
☐ Price
☐ Uniden Reputation
☐ Warranty
☐ Previous Use
☐ Features
☐ Quality

20. Please check your age category
☐ Under 20
☐ 20-25
☐ 26-30
☐ 31-35
☐ 36-40
☐ 41-45
☐ 46-50
☐ 51-55
☐ 56-60
☐ 61-65
☐ 66 & Over

21. Occupation
☐ Homemaker
☐ Teacher/Educator
☐ Professional Driver
☐ Executive/Administrator
☐ Civil Servant
☐ Sales/Marketing
☐ Farmer/Agriculture
☐ Clerical
☐ Military
☐ Technical/Professional
☐ Business/Professional
☐ Craftsworker
☐ Machine Operator/Laborer
☐ Retired
☐ Student

22. Please check your approximate family income.
☐ Under $10,000
☐ $10,000-19,999
☐ $20,000-29,999
☐ $30,000-39,999
☐ $40,000-49,999
☐ $50,000-59,999
☐ $60,000 & Over

Installation

Rechargeable Batteries

The BC 100XLT comes with a rechargeable NiCad battery pack. When fully charged this power supply will provide up to 5 hours of dependable use. To install the battery pack, simply slide it on to the bottom of the scanner.

When the batteries become low, simply plug the AC Adaptor/Charger into the jack on the rear of the battery pack and charge overnight. It is important to periodically allow the batteries to discharge completely to maintain full operating capability. See the Battery Maintenance section of this guide.

WARNING: Turn the ON/OFF, Volume switch OFF before attaching or detaching the battery pack.

To remove the battery pack from the unit, simply slide it to the left.

WARNING: Do not allow the terminals of the battery pack to be shorted. Fire or serious injury may result. Do not place the battery pack in your pocket where keys or other metal objects etc. may short out the battery terminals.

Flexible Antenna Installation

The BC 100XLT includes a flexible antenna for handheld use . Put the antenna onto the BNC connector on the top of the scanner and turn the antenna connector clockwise 1/4 turn to lock it on. Under normal conditions this antenna should provide excellent reception. However, factors such as location within your home, and proximity to electrical appliances may determine reception quality. For weak signal reception or electrically noisy locations, an external antenna may be helpful. A mating plug (optional) may be required to connect an external antenna.

AC Adaptor

The BC 100XLT can be powered by the AC Adaptor included with the scanner which converts standard household current to 12V DC. Plug the small connector of the AC Adaptor into the jack in the back of the radio marked DC 12V. Plug the other end into any standard 120 V AC household outlet.

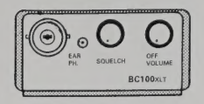
Note: Please be sure to use only model AD-140U AC Adaptor/charger, or the model PS-001 Cigarette lighter adaptor (optional), as higher voltage, or reverse polarity may damage your unit.

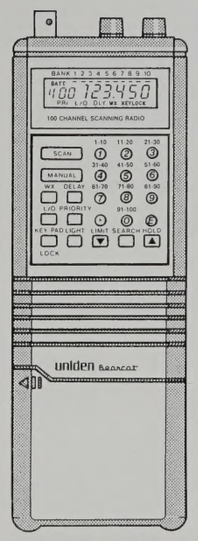
Memory Backup

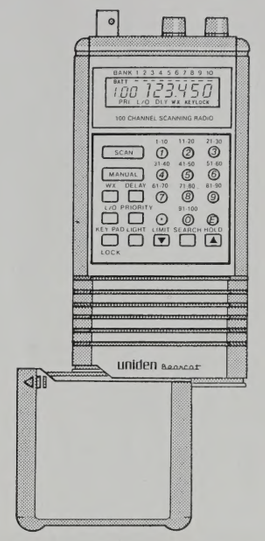
Frequencies maintained in the BC 100XLT memory are protected from loss by a built-in capacitor which protects the memory for up to 30 minutes when you are replacing the batteries.

Controls and Functions

1. **On/Off, Volume** - Turns the unit on, or off, and controls the audio output level.
2. **Squelch** - Eliminates the annoying "rushing" sound that is present between transmissions when no signal is being received. Proper adjustment of this control keeps the receiver quiet and allows scanning until a signal is received.
3. **Scan** - Press to start scanning all frequencies programmed into memory that are not locked out.
4. **Manual** - Press to stop scanning. Press again to manually step to the next channel. Press and hold to rapidly step through the channels. Press the channel number and then the manual key to go directly to a specific channel.
5. **Priority** - The priority key samples the first channel of each selected bank every two seconds regardless of other operational settings. Priority function will be retained in memory.
6. **Hold** - Press to stop and hold the search function on the current frequency. Press again to manually step up to the next frequency. Press and hold to rapidly step up through the search frequencies.
7. **LCD Display** - The LCD display shows the channel number and frequency, the selected bank(s), lockout, delay, priority, weather, keypad lock, and low battery indications.
8. **Weather Search** - The weather key searches all seven NOAA weather frequencies until it locks on the one that is active in your area.
9. **Delay** - The delay key provides a 2 second delay on any channel to receive a reply transmission on the same frequency before resuming search or scan. Delay is retained in memory.
10. **Limit** - Enter the low and high limits of the search range. Press to manually step the search frequency down. Press and hold to rapidly step down through the search frequencies.
11. **Search** - Press to search for new active frequencies within preset ranges of any band.
12. **Lockout** - Press to lockout the reception of frequencies on selected channels during scanning. Lockout is retained in memory. Press again to deselect lockout. **Note**: Channel 1 cannot be locked out if priority has been selected. All other priority channels may be locked out.
13. **Numeric Keypad** - ("0-9" and " ") Used to program all frequencies into memory and for direct channel access. During the scan mode these keys are utilized to select or deselect any of the 10 memory banks.
14. **Enter** - The "E" key is used to enter frequencies into the scanning memory.
15. **Keypad Lock** - This unique feature is used to lock the keypad to prevent accidental entries. To lock the keypad, press once. To unlock, press again.
16. **Light** - Press to turn the display light on for 15 seconds. Pressing this button again while the light is on will turn it off.
17. **Earphone** - The earphone jack allows you to use an earphone for privacy or in case of a high noise environment.







Slide to the left to remove battery pack.

Operation

The BC 100XLT has 100 memory channels, each of which can be programmed to store one frequency. The channels are divided into 10-10 channel banks, useful for storing similar frequencies in order to maintain faster scanning cycles. When scan is pressed, each of the programmed frequencies within a selected bank will be sampled for a transmission (locked channels will be skipped) at the rate of about 15 channels per second. If an active frequency is found the unit will stop and monitor that frequency until there is no longer any activity. A two second delay can be added to each channel and will allow the unit to monitor the frequency for a return or continued transmission. If, after two seconds, the frequency remains inactive, the scanning cycle will resume.

When the unit is first turned on, each channel will contain "000.000". When new frequencies are programmed, the old will be erased. If an invalid frequency is entered, "Error" will be displayed. The frequency that was previously programmed into that channel will remain unchanged.

To operate the scanner make sure that the batteries are charged or power is correctly connected to the unit. Turn the volume control on and adjust the desired level. Adjust the squelch by turning the knob fully clockwise until a rushing sound is heard. Turn the knob back until the receiver is silent. After the channels have been programmed, operation is simple. Press the scan key to scan all the channels. While the receiver is scanning channels, pressing one of the number keys will turn a bank of 10 channels on or off. The black lines at the top of the LCD display show you which banks are selected. If a bank is already selected, (shown by a black line under the bank number) pressing the corresponding button will deselect that bank. Press the manual key to stop scanning. Repeatedly pressing the manual key will step through the channels in order.

LCD Display

The BC 100XLT has a backlit display which shows the current channel and frequency as well as other operational modes. When the unit is scanning, the channel number will rapidly advance while the frequency display will go blank. When the scanner is stopped the current channel and frequency will again be displayed.

When frequencies are programmed the display will show the digits as they are entered. The display will also show "PRI" when the priority mode is on, "L/O" whenever a channel appears that has been locked out, and "DLY" whenever a channel has been programmed for delay. Across the top of the display, a series of dashes under the numbers 1-10 will be present. These are the bank indicator numbers. These are selected or deselected during the scan sequence by the use of the numeric pad.

Because of inherent limitations, liquid crystal displays should not be subjected to extremes of temperature or humidity. If the unit is exposed to temperature below -20° C (-5° F) or above +60° C (+140° F), the liquid crystal display may temporarily cease to function properly, and in some cases permanent damage may result. It is, therefore, recommended that the radio not be subjected to extreme conditions, such as a closed automobile in direct sunlight or continuous sub-zero temperatures.

Features

The following is a brief description of the operational features of the BC 100XLT.

Manual Channel Selection - To manually select a channel press the manual key repeatedly until the desired channel number appears in the display. If you have deselected any of the banks it will be impossible to access any of those channels manually until you have selected the particular bank in which your channel exists. Press and hold the manual key to rapidly step through the channels.

or

Press the channel number you wish to access, then press the manual key. The scanner will automatically advance to the desired channel regardless of the bank status.

Lockout - Select the channel to be skipped. Press the lockout key. The lockout indicator will appear in the display whenever that channel also appears. To take lockout off press the lockout key on that channel.

Note: If priority is selected, channel 1 will not be able to be locked out. All other priority channels may be locked out.

Priority - When it is important to keep track of the activity on one frequency while listening to others, the priority function should be used. Program the important frequency into the first channel of any bank. Press the priority key to activate the priority function. Every 2 seconds the unit will check the first channel of all selected banks for activity (the priority indicator will appear in the display). If a transmission is found the unit will monitor that channel. If no signal is found, the unit will return to the previous channel and function. Press the priority key again to turn off the priority function.

Search - Use the search mode to look for new active frequencies within the bands of your scanner.
Enter the lower limit frequency on the keypad and press the limit key;

Enter the higher limit frequency and press the limit key again;

These two frequencies set the range that the unit will search. Press the search key to start searching. If an active frequency is found the scanner will stop to monitor the signal. Press the hold key to hold the search on this frequency. Press the hold key again to step up to the next frequency or press the limit key to step down to the previous frequency. If you press and hold down either the Hold or Limit keys, you will rapidly step through the search frequencies. (Step up with the Hold key, and step down with the Limit key.) When the signal stops or if you press the search key, the unit will continue searching. Press the manual key to leave the search mode.

Low Battery Indicator

The BC 100XLT has a low battery indicator to let you know when your battery needs to be recharged. When the BATT indicator on the LCD display starts to blink, it means that the battery pack needs to be charged. After the low battery indicator has been blinking for about ten minutes, the scanner will shut itself off to prevent the batteries from becoming completely discharged. See the section of this manual on Battery Maintenance for more information.

Programming

To program a frequency into a channel, press the digits of that frequency including the decimal point and then, press the enter key. If an invalid frequency is entered, the display will show "Error". To change a frequency enter the new one and the old one will be erased.

To program 162.550 into channel 2:

Press 2 MAN

Press 1 6 2 . 5 5 0 E

To program 471.2375 into channel 7:

Press 7 MAN

Press 4 7 1 . 2 3 7 5 E

To search from 150 to 160 MHz

Press 1 5 0 LIMIT

Press 1 6 0 LIMIT

Press SEARCH

Your BC 100XLT will then begin searching the frequencies from 150 to 160 MHz. If you encounter a frequency of interest, you can press the HOLD key to stop. If the scanner has already resumed searching, press HOLD and then use the HOLD and LIMIT keys to step the frequency up or down (HOLD to step up, LIMIT to step down).

To select or deselect a channel bank

When there is a black line under the bank number at the top of the display, the bank is selected. When there is not, the bank is deselected. While the unit is in scan mode, press the appropriate number key to select or deselect the desired bank.

Multiple Entries — When you press the "E" key to enter the same frequency in a different channel the LCD will show the channel number of the current frequency "Ch 45". If you want to repeat that frequency in the new channel press the "E" key again. That frequency will now be programmed in both channels. You can repeat a frequency as many times as desired.

CAUTION

When your unit has not been used for a long time, it can fail to operate at first power up. Please try to reset the power switch again and see that it operates perfectly!

Helpful Hints

The BC 100XLT is a high quality electronic radio receiver. The following hints should help you understand and enjoy your unit.

1. Make sure the unit is turned off before removing the battery pack. You may want to record the programmed frequencies before doing this in case memory is lost.
2. If memory is lost, simply reprogram each channel. Memory loss will be indicated by unfamiliar frequencies in each channel.
3. If strong interference or electrical noise is received, you may need to relocate your scanner. A higher elevation such as the second floor may provide better reception.
4. Whenever the keypad is used it is important to press firmly on the center of each key.
5. Do not use the scanner in high moisture environment such as the kitchen or the bathroom.
6. Clean the outside of the cabinet with a mild detergent. Do not use abrasive cleansers or solvents. Be careful not to rub LCD window area.
7. There are no user serviceable parts inside with the exception of the battery pack. Do not attempt any repairs except replacing batteries.

Battery Maintenance

NiCad batteries can develop a condition known as "memory". This condition can limit the amount of battery power available. To avoid this condition, the following battery maintenance steps should be practiced:

1. Every 2 - 3 months the scanner should be left on to drain all battery power. Be sure to write down the programmed frequencies for reprogramming when the batteries are charged
2. Recharge the batteries for 14-16 hours to insure a full charge.
3. Do not leave the charger plugged in for long periods of time. Do not recharge the unit unless it needs it.

PLACE FIRST CLASS STAMP HERE

uniden®
4700 Amon Carter Boulevard
Fort Worth, Texas 76155

ATTN: PC MARKET RESEARCH DEPARTMENT
Please do not send any products or service related correspondence to this address

Please fold here

23. What types of credit cards do you use?
- ☐ American Express, Diners Club, Carte Blanche
- ☐ Bank Card (Master Card, Visa, etc.)
- ☐ Gasoline Card. Name _____
- ☐ Department Store Card
- ☐ None of the above

24. What type of car(s) do you drive?
- ☐ Compact
- ☐ Mid Size
- ☐ Sports
- ☐ Full Size
- ☐ Station Wagon
- ☐ Van
- ☐ Recreation Vehicle
- ☐ Specialty
- ☐ Motor Cycle
- ☐ Pick Up

25. What magazine(s) do you read?
- ☐ Road & Track
- ☐ Car & Driver
- ☐ Motor Trend
- ☐ Auto Week
- ☐ American Trucker
- ☐ Road King
- ☐ Playboy
- ☐ Sports Illustrated
- ☐ Penthouse
- ☐ Time
- ☐ Newsweek
- ☐ Popular Science
- ☐ Popular Mechanics
- ☐ Consumer Reports
- ☐ People

Thank you for taking the time to complete this questionnaire. If you have any other comments or suggestions please write t

UNIDEN AMERICA CORPORATION
Product Development Dept.
4700 Amon Carter Boulevard
Fort Worth, Texas 76155

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INSTRUCTIONS: Fill out both sides of card. Cut out on dashed line. Fold on dotted line. Fold over flap and seal with glue or paste. Affix postage and mail.

Please fold here

Warranty

WARRANTOR: UNIDEN America Corporation (UNIDEN®)

ELEMENTS OF WARRANTY: UNIDEN® warrants, for the duration of this warranty, UNIDEN® Bearcat Scanners (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitation or exclusions set out below.

WARRANTY DURATION: This warranty shall terminate and be of no further effect one (1) year after the date of the original purchase of the Product or at the time the Product is (A) damaged or not maintained as reasonable and necessary, (B) modified, (C) improperly installed, (D) repaired by someone other than warrantor for a defect or malfunction covered by this warranty, (E) used in a manner or purpose for which the Product was not intended, or (F) sold by the original purchaser.

STATEMENT OF REMEDY. In the event that the Product does not conform to this warranty at any time while this warranty is effective, warrantor shall repair the defect and return it to you without charge for parts, service, or any other cost incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight prepaid, to warrantor at UNIDEN SERVICE CENTER 9340 Castlegate Dr., Indianapolis, IN 46256 with evidence of original purchase.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is void outside the United States of America.

PAT. UNDER ONE OR OR MORE OF THE FOLLOWING U.S. PATENT NUMBERS:

3,873,924	3,883,808	3,961,261	3,962,644	3,974,452
3,987,400	3,996,521	3,996,522	4,000,468	4,027,251
4,057,760	4,092,594	4,100,497	4,114,103	4,123,715
4,157,505	4,179,662	4,219,821	4,270,217	4,398,304
4,409,688	4,455,679	4,461,036	4,521,915	4,627,100
RE 31,523				

OTHER U.S. AND FOREIGN PATENTS PENDING

UBUD01109AE (SK)

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